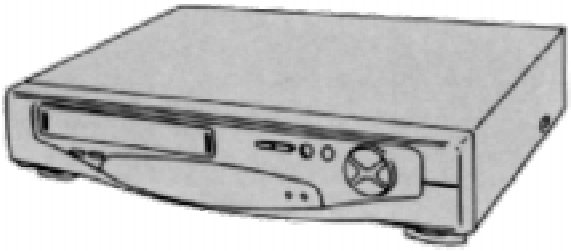
ORDER NO. VRD9506M118

Service Manual

Video Cassette Recorder

Panasonic VHS PAL

Hi-Fi HQ



NV-HD600EE

K-MECHANISM

Panasonic

SPECIFICATIONS

ITEM	SPECIFICATION
POWER	SOURCE: 220−240 V AC 50/60 Hz
	CONSUMPTION: 21 watts
RECORDING SYSTEM	2 rotary heads, helical scanning system
	PAL
TV TUNER SYSTEM	VHF I: CHR1−CHR5 (SECAM D) CHE2−CHS3 (PAL/SECAM B) VHF II: CHM1−CHM9 (PAL/SECAM B) VHF III: CHR6−CHR12 (SECAM D) CHM10−CHU2 (PAL/SECAM B) VHF H: CHU3−CHS41 (PAL/SECAM B) UHF: CH21−CH69 (PAL G, H, I/SECAM G, K, K1) 75Ω terminated
RF OUT SYSTEM	UHF: CH38$^{+2}_{8}$ (PAL G, H, I/SECAM G, K, K1) 73±3 dBμ, 75Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L′-R′ heads)
	INPUT: EURO AV Connector (21 pin×1) 1.0 Vp-p, 75Ω unbalanced
	OUTPUT: EURO AV Connector (21 pin×1) 1.0 Vp-p, 75Ω unbalanced

ITEM	SPECIFICATION
AUDIO	HEAD: 1 Stationary head (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
	INPUT: EURO AV Connector (21 pin×1) More than −6 dBV (500 mV), 10 kΩ
	OUTPUT: AUDIO OUT Connector (Phono type) −8 dBV (400 mV), Less than 1 kΩ EURO AV Connector (21 pin×1) −6 dBV (500 mV), Less than 1 kΩ
TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time: 2.5 min. with 180 min. type tape
DIMENSIONS	430(W)×91(H)×310(D) mm
WEIGHT	4.7 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-red Remote Controller

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

1-1-1. CHANNEL MEMORY IC INITIALIZATION

When replacing the memory IC7704, its IC should be initialized.

Note:1) It should be performed before tuning.
2) Meaning of "INITIALIZATION" is to make dependency in different models and to distinguish between different features.

Method:
1) Connect a jumper wire (K2501) which has been cut as shown below.

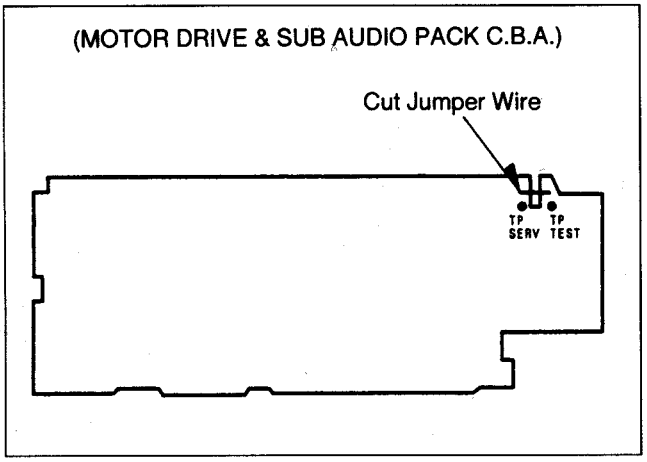


Fig. S1

2) Press the "FF", "REW" and "EJECT" buttons to set the Service Mode. (Test Mode will be appeared on the monitor TV.)
3) Set the Model Code for this model by using 10-key on the Remote Controller Unit as follows.
4) After finishing the initialization, cut the K2501 and cancel the Service Mode.

		NV-HD600EE
Code No.	IR	153
	OSD	152

Note:1) Set to IR No. when there is OSD button on the Remote Controller.
2) Set to OSD No. when there is not OSD button on the Remote Controller.

1-1-2. SERVICE POSITION

A. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.

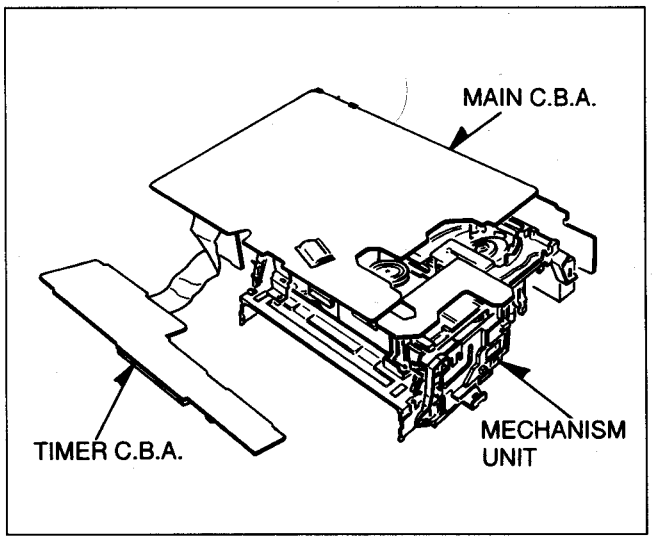


Fig. S2

B. MECHANISM SERVICE POSITION

When servicing the K-Mechanism, take out the mechanism from the MAIN C.B.A. and connect Extention Cable (VFK0889) between the loading-motor connector and P2001 as shown below.
In this position, the following services are possible.

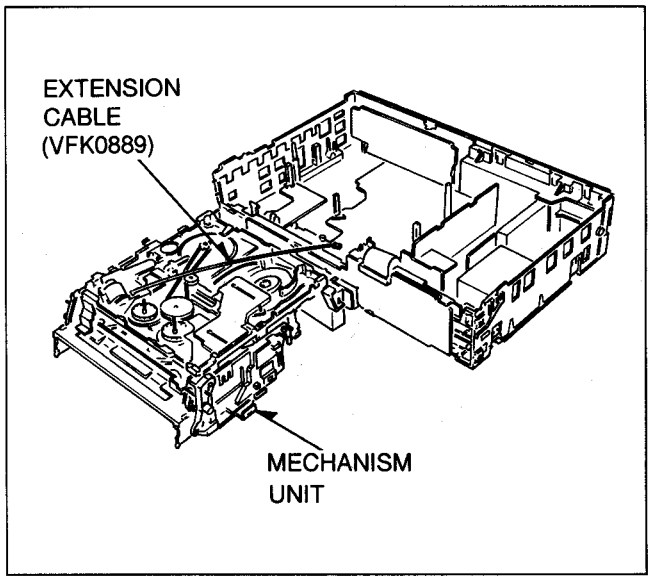


Fig. S3

B-1. CHECKING OF GEAR PHASE ALIGNMENT CONDITION

1) Check gear phase Alignment Condition of Mechanism.

B-2. CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for manual operation of loading/unloading operation as follows.

1. HAND OPERATION
   1) Turn the Worm Gear or the Worm Wheel Gear (Remove the Loading Motor Unit) manually.

2. BATTERY OPERATION
   1) Remove the Extention Cable (VFK0889).
   2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals.

3. SERVICE INFORMATION DISPLAY OPERATION
   1) Set the Service Information Display mode. (Press the "FF", "REW" and "EJECT" buttons simultaneously.)
   2) Press the "FF", "REW" and "EJECT" buttons 7 times to set the Service Mode 7. (The end of display on the Display becomes "--".)
   3) In the above Service Information Display mode, the Loading Motor rotates for Loading operation when the "PLAY" button is pressed.
      The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of mechanism movement.

B-3. CHECKING OF REEL GEARS OPERATION

1) Move the mechanism to "PLAY" position by loading operation. (Refer to B-2)
2) Turn the Capstan Rotor Unit to check movement of reel gears.

1-1-3. INPUT/OUTPUT PACK AND MOTOR DRIVE & SUB AUDIO PACK C.B.A.s SERVICE POSITION

Use the extension cables when checking.

PART NO.	PART NAME	PCS	CONNECTION
VFK0939	13-PIN WIRE CABLE	1	PP3901 (MAIN) – PS3901 (I/O)
VFK0678	18-PIN WIRE CABLE	1	PP3902 (MAIN) – PS3902 (I/O)
VFK0917	11-PIN WIRE CABLE	1	PP2001 (MAIN) – PS2501 (M. DRIVE)
VFK0918	17-PIN WIRE CABLE	1	PP2002 (MAIN) – PS4701 (M. DRIVE)

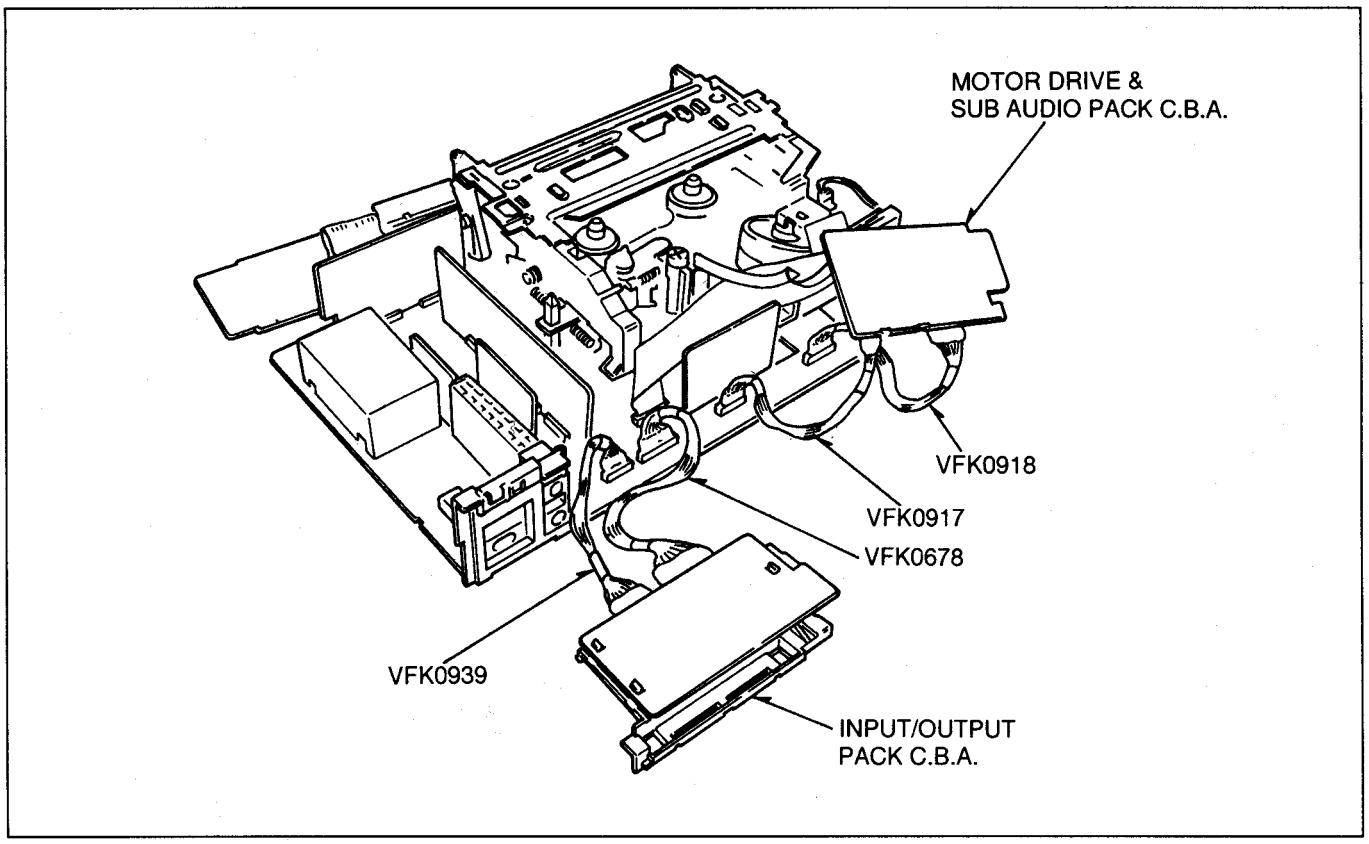


Fig. S4

1-1-4. UPPER CYLINDER REPLACEMENT

A. UPPER CYLINDER DISASSEMBLY

1) Remove the Top Panel.
2) Remove the Screw (A) and Cylinder Angle.
3) Remove the Screw (B) and Earth Plate.
4) Lift up the Upper Cylinder.

Note: Do not remove 3 Screws on the Upper Cylinder.

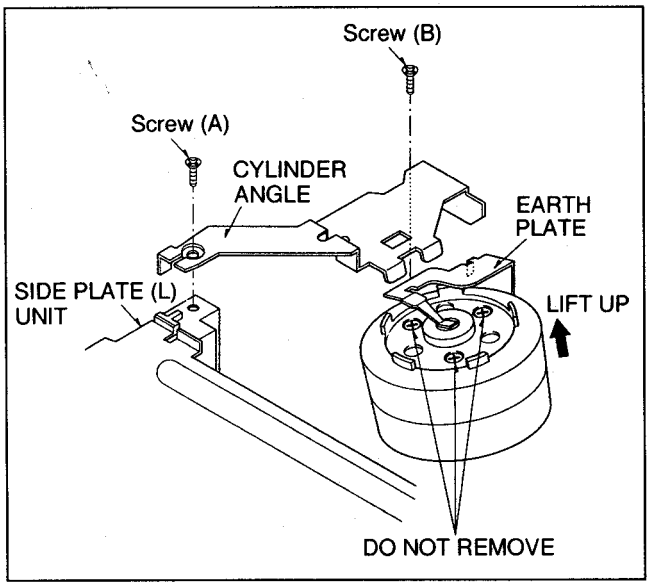


Fig. S5

Do not remove the Rotor Magnet which fixed by 3 screws on the Upper Cylinder.

If it is removed, refer to following method.

1) Install the Rotor Magnet so that the hole (C) on the Rotor Magnet fits to the small projection (D) on bottom of the Upper Cylinder.
2) Tighten 3 screws on top of the Upper Cylinder.

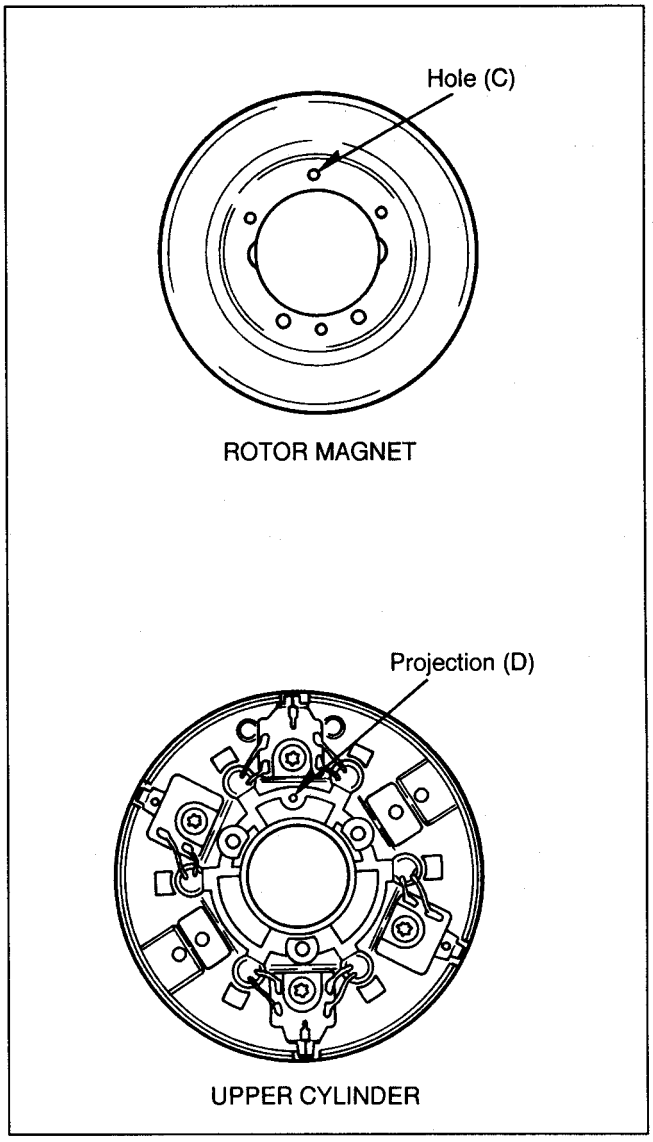


Fig. S6

B. UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order of the DISASSEMBLY METHOD.

1-1-5. NEW GLDD CYLINDER UNIT REPLACEMENT

The Cylinder Unit can be replaced easily by the following method.

1) Remove the Top Panel.
2) Remove the 2 screws (RED) of Head Amp Mount.
3) Remove the Screw (A) and Cylinder Angle. (Fig. S5)
4) Remove the Screw (B) and Earth Plate. (Fig. S5)
5) Remove the 3 screws of the Cylinder Unit with a magnetized screw driver through the holes on the Bottom Plate as shown below.

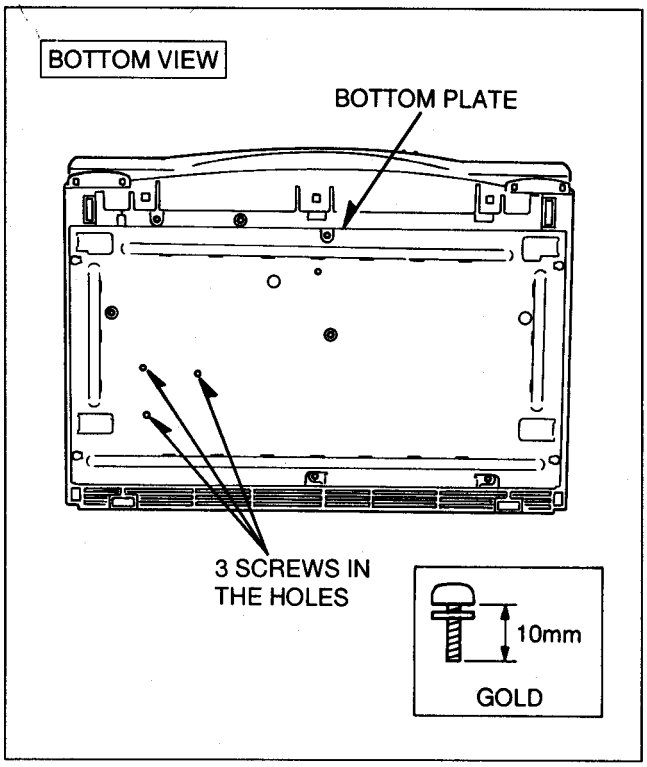


Fig. S7

1-1-6. FLAT CARD CABLE INSTLLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

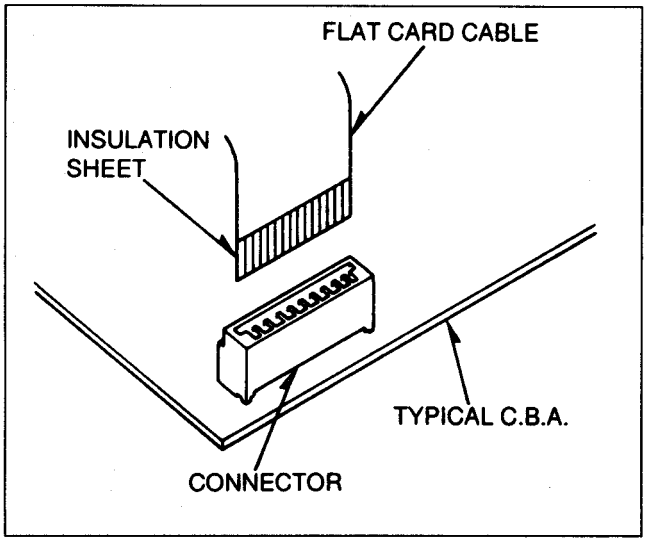


Fig. S8

1-1-7. CAPSTAN STATOR UNIT ASSEMBLY

When replacing the Capstan Stator Unit, the Centre Fixing Tool (VFK0851) must be used to fix the centre of Capstan Stator Unit.

Method:

1) Place the Capstan Stator Unit into position.
2) Loosely tighten the 3 screws.
3) Insert the Centre Fixing Tool (VFK0851) as shown below.
4) Tighten the 3 screws.
5) Remove the Centre Fixing Tool.

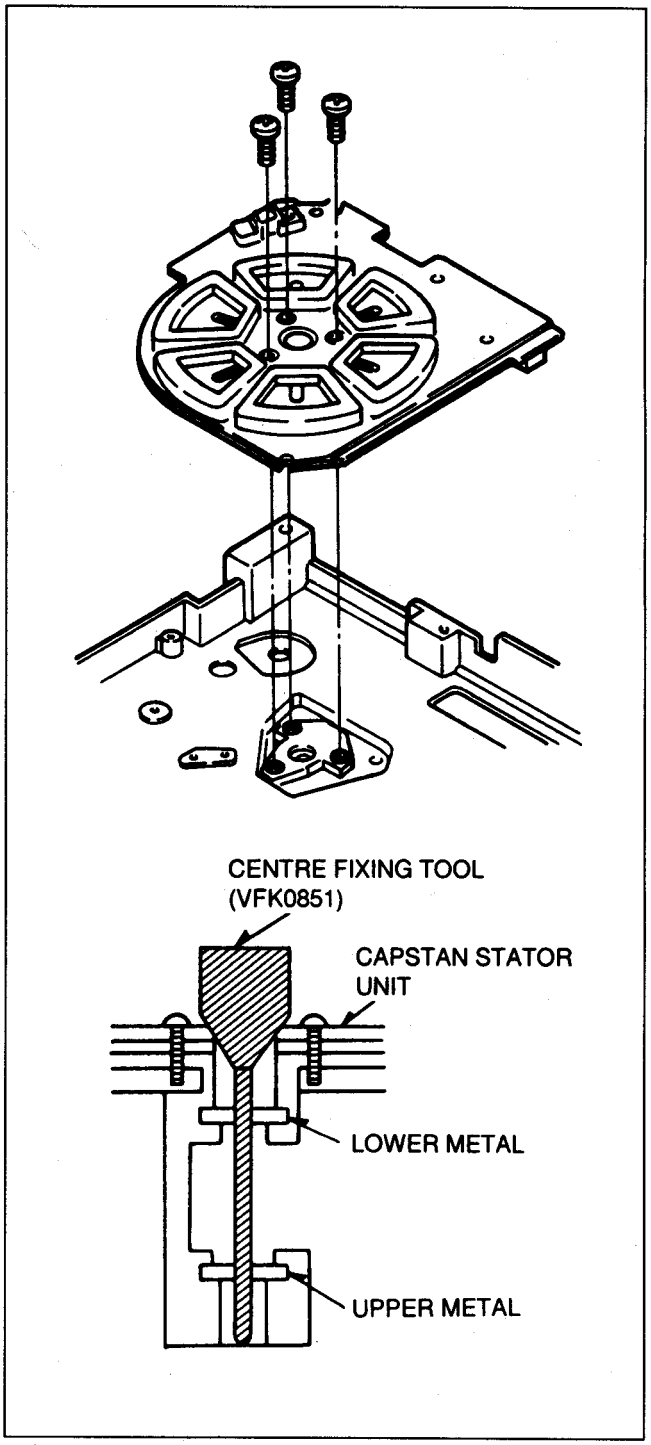


Fig. S9

1-1-8. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

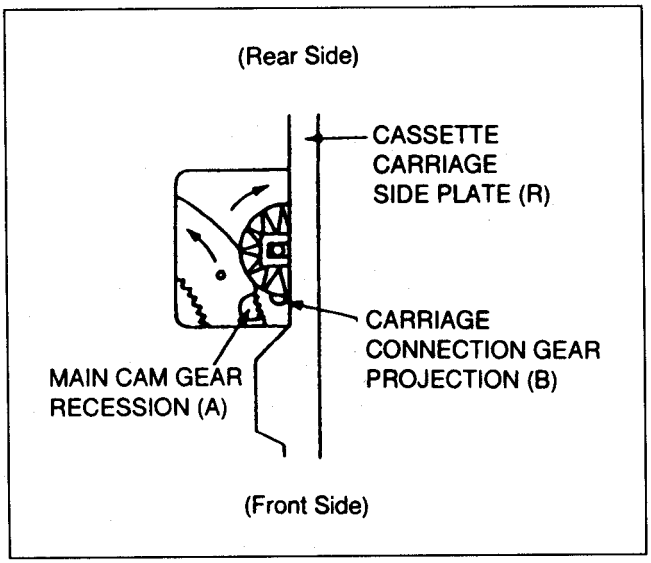


Fig. S10 Top View of Eject Operation

1-1-9. TAKE-UP PHOTO SENSOR OPERATION

Note the following matters for Take-up Photo Sensor Operation.

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take-up Photo Sensor. In this case, cover the Take-up Photo Sensor to prevent the light from falling on it.
2) While servicing of the K-Mechanism with "Power On" and without cassette tape inserted, the Unit does not operate properly.

1-1-10. REMOVAL OF THE CASSETTE TAPE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Take out the mechanism from MAIN C.B.A.
2) Turn the Worm Gear manually, moving the Loading Post to the unloaded position.
3) Turn the Capstan Rotor Unit clockwise to take up the tape.
4) Turn the Worm Gear again to eject the cassette.

2. BATTERY OPERATION

1) Take out the mechanism from Main C.B.A.
2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./ +4.5V) to the Loading Motor terminals as shown below.
3) After moving the Loading Post to the unloaded position, disconnect the battery to stop the motor.
4) Turn the Capstan Rotor Unit to clockwise to take up the tape.
5) Reconnect the battery to eject the cassette.

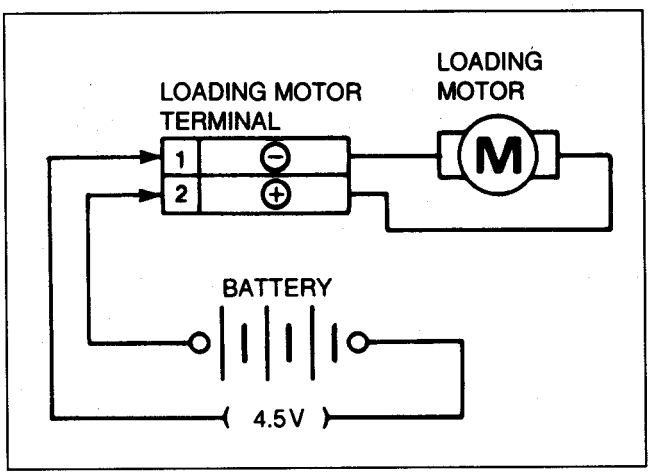


Fig. S11

If the cassette tape can not be removed by the above 2 methods, remove it by the following method.

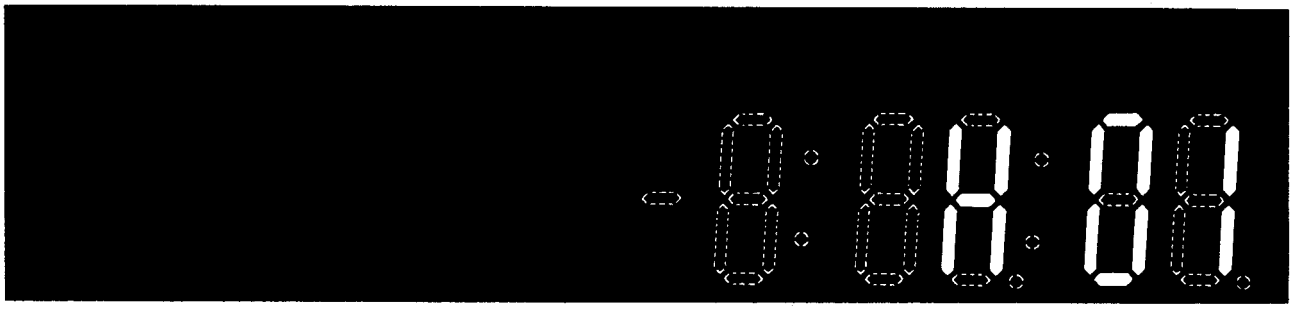
1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the cassette tape from tape transportation (P1, P2, P3 and P5 Posts).
5) Turn the Capstan Rotor Unit to take up the tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the cassette tape from the Cassette Compartment.

1-2. SELF-TEST INDICATION DISPLAY

This VTR has a self-diagnosis and display function. If the VTR detects trouble during installation or during use, one of the following Fault Indication Codes will automatically appear in the VTR display. Fault Indication codes are displayed in the form of a single English letter followed by two numbers, as for example "H01".

Note:1. The indication "U" is displayed on the FIP while power remains on.
2. Otherwise, the indication "H" or "F" is displayed on the FIP, and the power is automatically turned off. When the power is turned on again, the Fault Indication Code will disappear and the unit will return to normal display mode (either clock or counter).
3. This Fault Indication Code will be stored in the Timer microprocessor even with the AC plug disconnected.
The two-digit number portion of the stored Fault Indication Code can be redisplayed in the FIP's "second" display position (the last 2 digits on the light) by placing the unit is Service Mode Number 2 when turning on Service Information Display as for example "01" or "02" etc.
If a second error occurs, only the most recent error will be displayed and stored.
4. To erase the stored Fault Indication Code data, press the FF, REW and EJECT buttons simultaneously for 5 seconds.

〈FIP〉



INDICATION	CAUSE	REMEDY/CHECK
U 10	Dew formation.	Wait until the indication disappears.
H 01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder-motor drive circuit.
H 02	Cassette tape is not wound up during tape unloading except Eject mode.	Check the capstan-motor drive circuit.
F 03	Mechanism locks during mode transition except Eject mode.	1. Check the loading-motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the Mode Switch.
F 04	Mechanism locks during tape unloading.	1. Check the loading-motor drive circuit. 2. Check the mechanism phase alignment.
F 05	Cassette tape is not wound up during tape unloading in Eject mode.	1. Check the capstan-motor drive circuit. 2. Check the Supply/Take-up reel pulse.
F 06	Mechanism locks after tape unloading in Eject mode.	1. Check the loading-motor drive circuit. 2. Check the mechanism phase alignment for Cassette Holder Unit.
F 09	No serial clock transmission between IC6001 and IC7501.	Check the serial clock circuit.

Fig. T1 Self-Test Indication Display

1-3. SERVICE INFORMATION DISPLAY

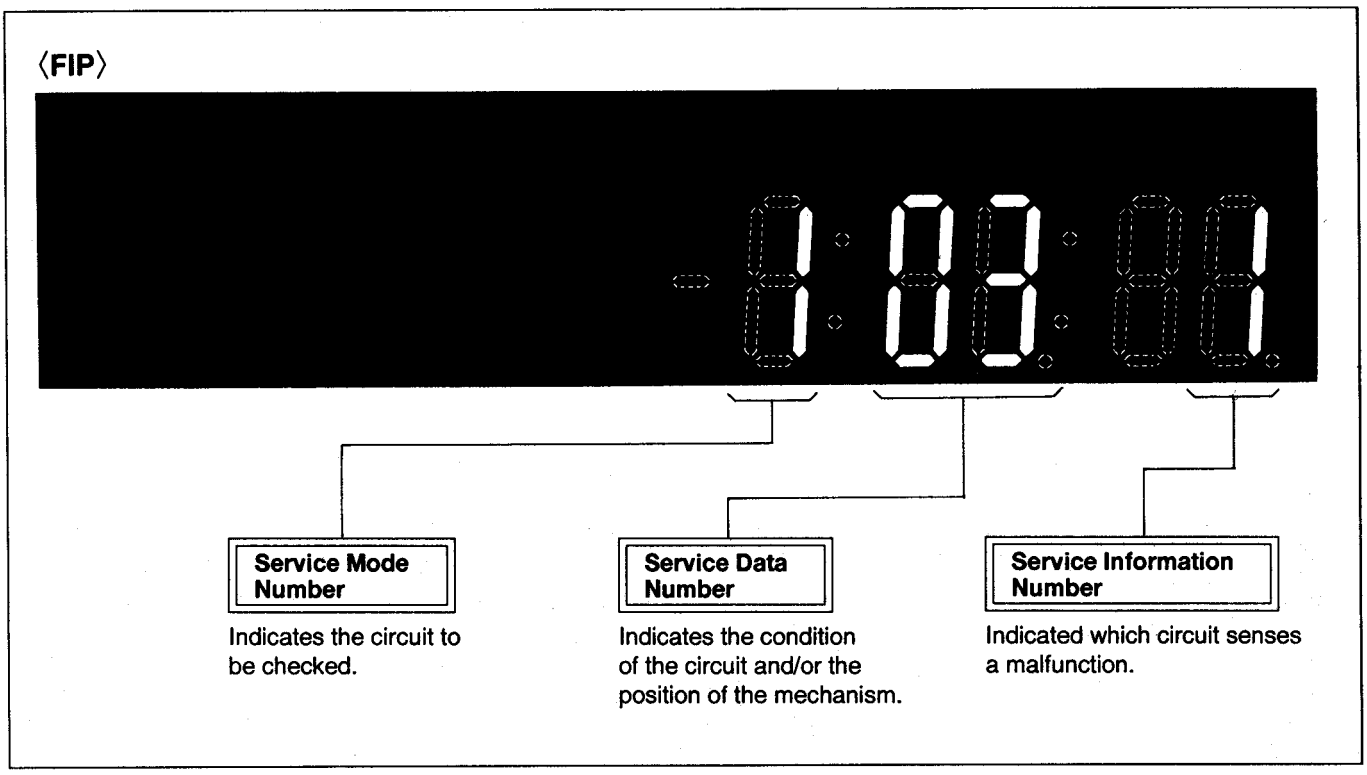


Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Press the "FF", "REW" and "EJECT" buttons simultaneously.
(2) Connecting a Jumper wire between TPSERV and TPTEST will display the service information indefinitely.

In the Service Information Display, there are four digits divided into 3 functions.
The first digit indicates which of the 8 service modes that the unit is currently in.

MODE 1 : Checks tape protection circuit
MODE 2 : Checks tape transport mechanism
MODE 3 : Checks mode switching operation
MODE 4 : Checks control buttons
MODE 5 : Checks capstan motor
MODE 6 : Checks cylinder motor
MODE 7 : Checks loading/unloading operation
MODE 8 : Not used.
(The MODE 8 is displayed only when connecting a jumper wire between TPSERV and TPTEST.)

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service Information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied. (except service mode number 2, 7 and 8)

1-3-3. Use of Service Modes

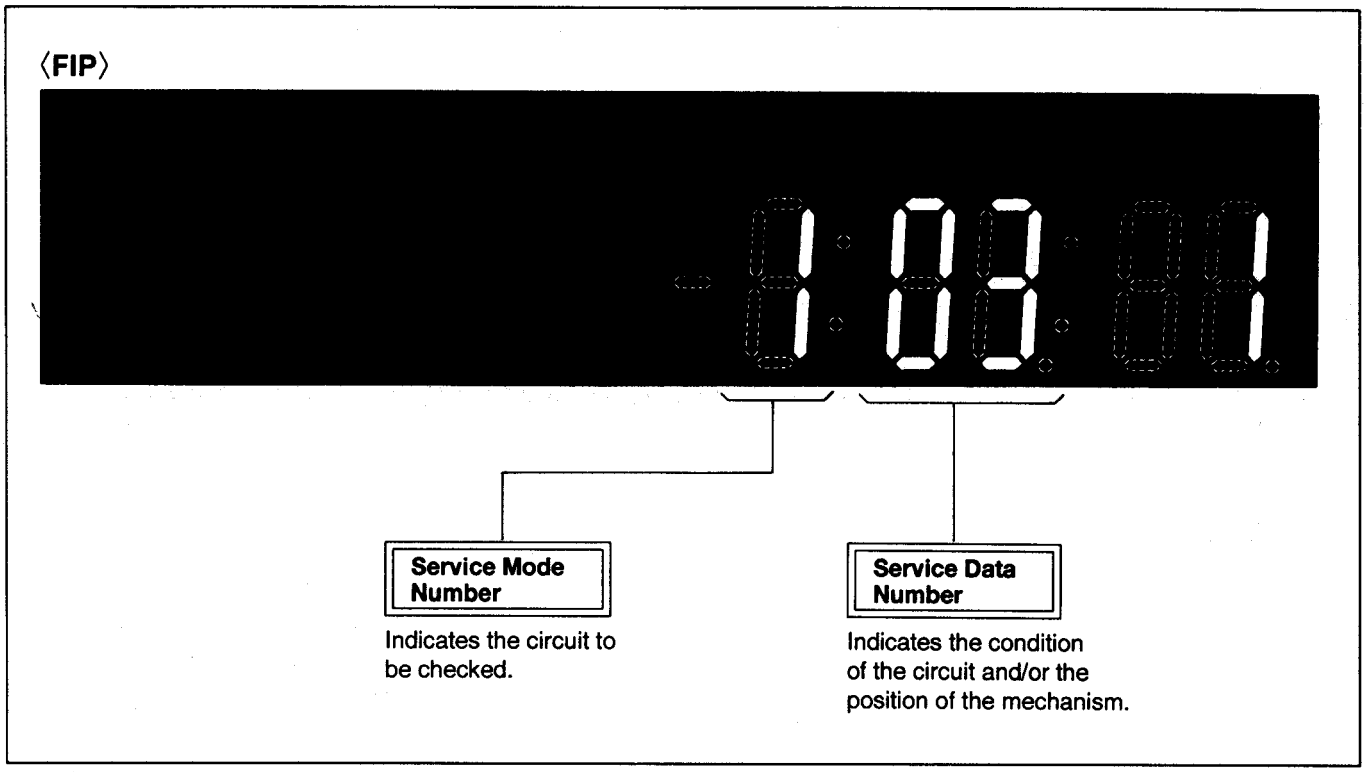


Fig. D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.
(2) To change Service Modes press the "FF", "REW" and "EJECT" buttons simultaneously.
(3) Mode 1 : Checks that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors.
When the light is blocked to both sensors, "00" should be indicated on the service data number.
When the light is blocked to the supply sensor, "01" should be indicated.
(4) Mode 2 : Checks the mode switch circuit while indicating mechanism position.
Service Data Numbers indicate the position of the mode switch and there by the mechanism position.
(5) Mode 3 : Checks that mode switch circuit operations have been completed.
Service Data Number should indicate "00" after each mechanism operation is completed.
(6) Mode 4 : Checks the operation circuit.
Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.
(7) Mode 5 : Checks the capstan motor circuit.
Indicates if the IC6001 has received the command to rotate the capstan motor.
(8) Mode 6 : Checks the cylinder motor circuit.
IC6001 has received the command to rotate the cylinder motor.
(9) Mode 7 : Checks the Loading/Unloading Operation.
The Loading Motor rotates for loading operation when the "PLAY" button is pressed.
The Loading Motor rotates for unloading operation when the "STOP" button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.
(10) Mode 8 : Not used.

<NOTE>
Refer to Fig. D5 for details of Service Data Numbers.

1-3-4. Service Information Number

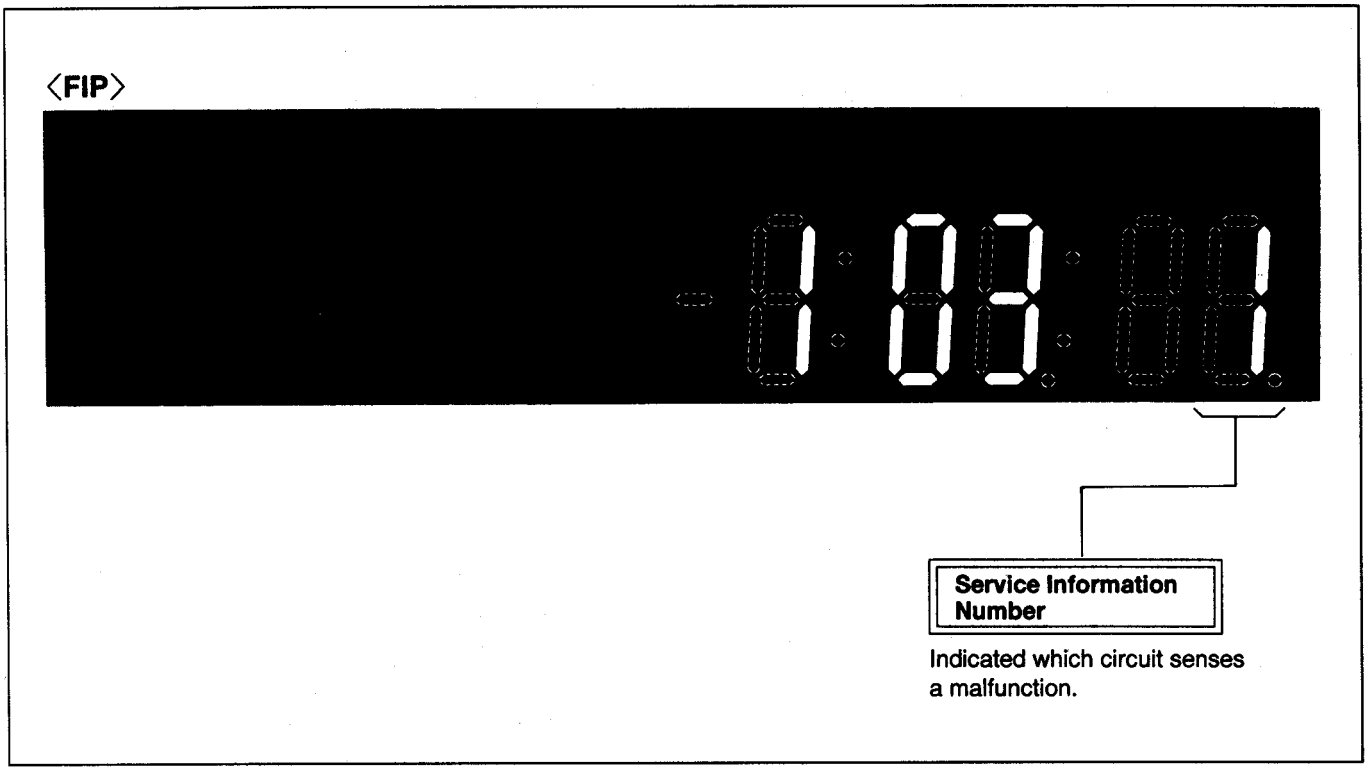


Fig. D3 Service Information Number on S.I.D.

Refer to Fig. D4 for details of Service Information Number.

Note:
The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is supplied.
If a second error occurs, only the most recent error will be displayed.
(except service mode number 2, 7 and 8)

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-In/Eject operation

Fig. D4 Detail Service Information Numbers

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	———	00	No light detected at either sensor.	Tape not required.
		01	Tape Beginning. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	———	00	EJECT	Tape Required. *1: STOP3; The Pinch Roller is on the capstan motor shaft. *2: STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig. D7 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 *1	
		05	STOP *2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6		Tape not required.
5	Left digit only, disregard Right digit display.	8 1 Left Digit Right Digit	8, 9, u, A, −, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	8 7 Left Digit Right Digit	1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor "CUE, FF, Forward Slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	8 Left Digit Right Digit	8, 9, u, A, −, n, L, and no display indicate that the Capstan motor "Reverse, Rew, Reverse Slow" commands received by IC6001.	
6	Left digit only, disregard Right digit display.	1 0 Left Digit Right Digit	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

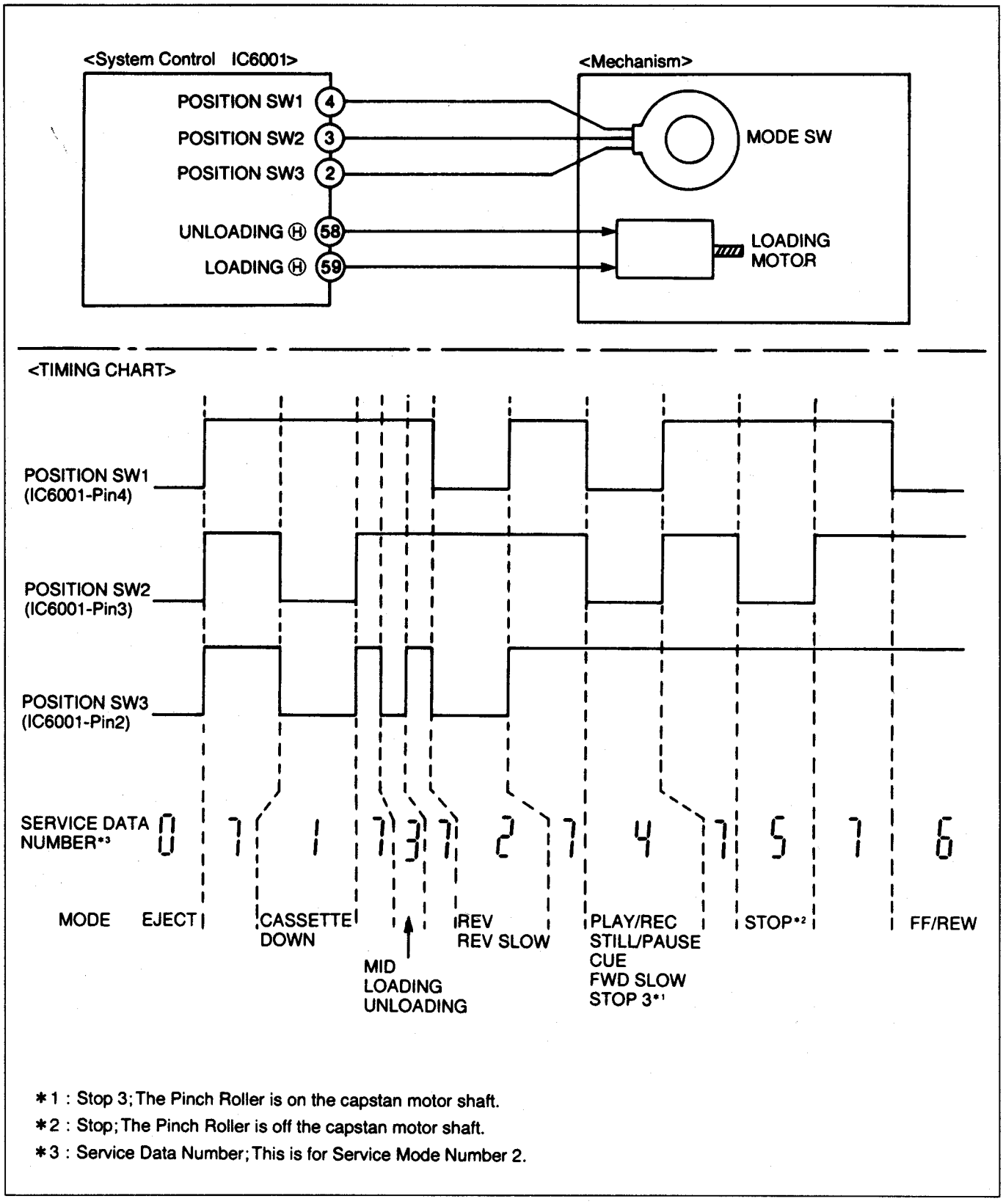
Fig. D5 Service Data Display and Indication

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	06	PAUSE/STILL
01	EJECT	54	RESET
-0	INPUT SELECT	5	ZERO STOP
—	SP/LP	49,4U	INDEX
34,35	∧ ∨, + −	A1,A2	TRACKING (+, −)/V-LOCK
—	CANCEL	0	SLOW
—	MENU	57	OSD
A4	TIMER REC	00	STOP
08	REC	03,02	FF, REW
33	AUDIO OUT	55	DISPLAY
—	SHOW VIEW/G-CODE/VIDEO PLUS	0U	PLAY

Fig. D6 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position through the Mode SW.
Fig. D7 shows the timing for Service Mode Number 2.



*1 : Stop 3; The Pinch Roller is on the capstan motor shaft.
*2 : Stop; The Pinch Roller is off the capstan motor shaft.
*3 : Service Data Number; This is for Service Mode Number 2.

Fig. D7 Timing Chart of Mode SW

1-3-6. Input/Output Chart for IC6001

<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>1</td><td>I</td><td>SAFETY TAB</td><td>When inserting the cassette tape with safety tab, this port is low.
When there is no safety tab, this port is high to prevent recording.</td></tr>
<tr><td>2</td><td>I</td><td>POSITION SW 3</td><td rowspan="4">
<table>
<tr><th>P. SW 3</th><th>P. SW 2</th><th>P. SW 1</th><th>Position (Mode) Name</th></tr>
<tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr>
<tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr>
<tr><td>O</td><td>I</td><td>O</td><td>REV, REV SLOW</td></tr>
<tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING/UNLOADING)</td></tr>
<tr><td>I</td><td>O</td><td>O</td><td>PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1</td></tr>
<tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr>
<tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr>
<tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the capstan motor shaft.</td></tr>
<tr><td>3</td><td>I</td><td>POSITION SW 2</td></tr>
<tr><td>4</td><td>I</td><td>POSITION SW 1</td></tr>
<tr><td>5</td><td>I</td><td>SUPPLY REEL PULSE</td><td>Supply Reel Pulse Input
(For detecting tape remaining)</td></tr>
<tr><td>6</td><td>I</td><td>NORMAL/ SERVICE/TEST</td><td>Service Mode Setting
Normal Mode : High
Service Mode : Middle
Test Mode : Low</td></tr>
<tr><td>7</td><td>I</td><td>DEW</td><td>Not used (Low setting)</td></tr>
<tr><td>8</td><td>I</td><td>TEST</td><td>Not used (Low setting)</td></tr>
<tr><td>9</td><td>I</td><td>ENVELOPE SELECT</td><td>The playback envelope video signal level is detected at this input to select the video head in the special playback modes.</td></tr>
<tr><td>10</td><td>O</td><td>ROTARY SW</td><td>This signal is supplied to the chrominance circuit to perform the phase rotation.</td></tr>
<tr><td>12</td><td>O</td><td>HEAD AMP SWITCH</td><td>This signal is supplied to the head amp circuit to switch the video head, SP or LP.</td></tr>
<tr><td>14</td><td>O</td><td>ARTIFICIAL V/H/N</td><td>Artificial Vertical Sync Signal is supplied to video circuit to stabilize the picture in the special playback modes.</td></tr>
<tr><td>17</td><td>I</td><td>TAKE-UP PHOTO</td><td>Take-up Side Photo Sensor Input
(For detecting tape beginning)</td></tr>
<tr><td>18</td><td>I</td><td>SUPPLY PHOTO</td><td>Supply Side Photo Sensor Input (For detecting tape end.)</td></tr>
<tr><td>19</td><td>I</td><td>TAKE-UP REEL</td><td>Take-up Reel Pulse Input
(For detecting tape remaining and reel (Cap.) lock.)</td></tr>
<tr><td>20</td><td>O</td><td>SP/LP</td><td>Not used</td></tr>
<tr><td>45</td><td>O</td><td>AUDIO H. SW</td><td>This signal is supplied to the head amp circuit to switch the audio head, R or L.</td></tr>
<tr><td>46</td><td>O</td><td>SERIAL CLOCK SELECT</td><td>Refer to Fig. MP4 and MP5.</td></tr>
<tr><td>47</td><td>I</td><td>SYSTEM SEL</td><td>Refer to Fig. MP5.</td></tr>
<tr><td>48</td><td>I</td><td>L CH/R CH</td><td>Refer to Fig. MP4.</td></tr>
<tr><td>49</td><td>I</td><td>BIL/STEREO</td><td>Refer to Fig. MP4.</td></tr>
<tr><td>50</td><td>O</td><td>MESECAM (H)</td><td>Refer to Fig. MP6.</td></tr>
<tr><td>51</td><td>I</td><td>NTSC/PAL</td><td>Refer to Fig. MP4.</td></tr>
</table>

Fig. MP1

Pin Number	Input/Output	Port Name	Function
52	I	TV/VTR	Refer to Fig. MP4.
53	I	MONO 1/2	Refer to Fig. MP4.
54	O	SENSOR LED ON (L)	When turning on the Sensor LED, this port is low. 1) STOP Mode: No lit. 2) FF, REW, CUE, REV Modes: lit. 3) EJECT Mode: blinking. (Cycle: 320 msec)
55	O	VOLTAGE CHANGE (H)	When increasing the drive torque of loading motor to perform the FF/REW mode, this port is low.
56	O	DBS (L)	Refer to Fig. MP6.
57	O	SECAM (H)	Refer to Fig. MP6.
58	O	UNLOADING (H)	When unloading, this port is high.
59	O	LOADING (H)	When loading, this port is high.
60	O	HEAD SW	This signal is supplied to the head amp circuit to switch the video head, R or L.
61	O	CURRENT LIMIT	Capstan torque limitter output
62	O	CAP R/S/F	Capstan Rotation Direction Output Reverse : High Stop : Middle Foward : Low
63	O	SERIAL CLOCK	Serial Clock Output
64	I/O	SERIAL DATA	Serial Data In/Out
65	O	SP (H)	Tape Speed Output SP : High LP : Low
66	O	DELAYED REC (H)	When the video goes to the recording mode after a delay from the video recording command, this port is high.
67	O	DELAYED AUDIO REC (H)	When the audio goes to the recording mode after a delay from the audio recording command, this port is high.
68	O	PAL I (H)	When selecting the PAL-I system during tuner preset.
69	O	REC (H)	When the video goes to the recording mode, this port is high.
70	O	NTSC (L)	System Output NTSC : Low PAL : High
71	O	AUDIO MUTE (H)	When the audio goes to the mute mode, this is high.
72	O	CAPSTAN REVERSE (H)	Not used
73	O	VTR (L)	VTR/TV switch output
74	O	A. DUB (H)	Not used
75	O	CURRENT EMPHASIS (H)	When the servo goes to the edit mode, this is high.
76	O	FF/REW (L)	When the servo goes to the FF/REW mode, this is low.
77	O	FM MUTE (H)	When the FM audio goes to the mute mode, this is high.

Fig. MP2

Pin Number	Input/Output	Port Name	Function
78	O	VIDEO EE (L)	When the video goes to the EE mode, this is low.
79	O	TRICK (L)	When the video goes to the special playback (CUE, REV, SLOW, STILL) mode, this is low.
80	O	POWER OFF (H)	Power ON/OFF Control is low when the power switch is turned on.
82	I	OSC 1	Oscillator input
83	O	OSC 2	Oscillator output
84	I	RESET (L)	When reseting the IC6001, this port is low.

Fig. MP3

		PIN 46 OUTPUT (SCAN OUT)	
		L	H
PIN 48 INPUT (RCH/LCH)	L	R CH	L CH
	H	—	—
PIN 49 INPUT (STER/BIL)	L	STEREO	BILINGUAL
	H	—	—
PIN 51 INPUT (SYSTEM/ DECK TYPE)	L	PAL SYSTEM	TV/VTR COMBINATION TYPE
	H	NTSC SYSTEM	TABLE TYPE
PIN 52 INPUT (TV/VTR)	L	COMPULSION TV	
	H	AUTO	
PIN 53 INPUT (MONO1/2)	L	MONO 2	MONO 1
	H	—	—

Fig. MP4

	PIN 46 OUTPUT	MODE
	L H	
PIN 47 (SYSTEM SEL)	L L	MODE 1
	L H	MODE 2
	H L	MODE 3
	H H	MODE 4

Fig. MP5

	MODE 1, 4	MODE 2	MODE 3
PIN 50 (SYSTEM 1)	MESECAM Ⓗ OUT	MESECAM Ⓗ OUT	NTSC Ⓛ OUT
PIN 57 (SYSTEM 2)	NTSC-M Ⓗ OUT	SECAM Ⓗ OUT	—
PIN 56 (SYSTEM 3)	DBS Ⓛ OUT	DBS Ⓛ OUT	—
PIN 68 (SYSTEM 4)	PAL-I Ⓗ OUT	SECAM Ⓛ OUT	—

Fig. MP6

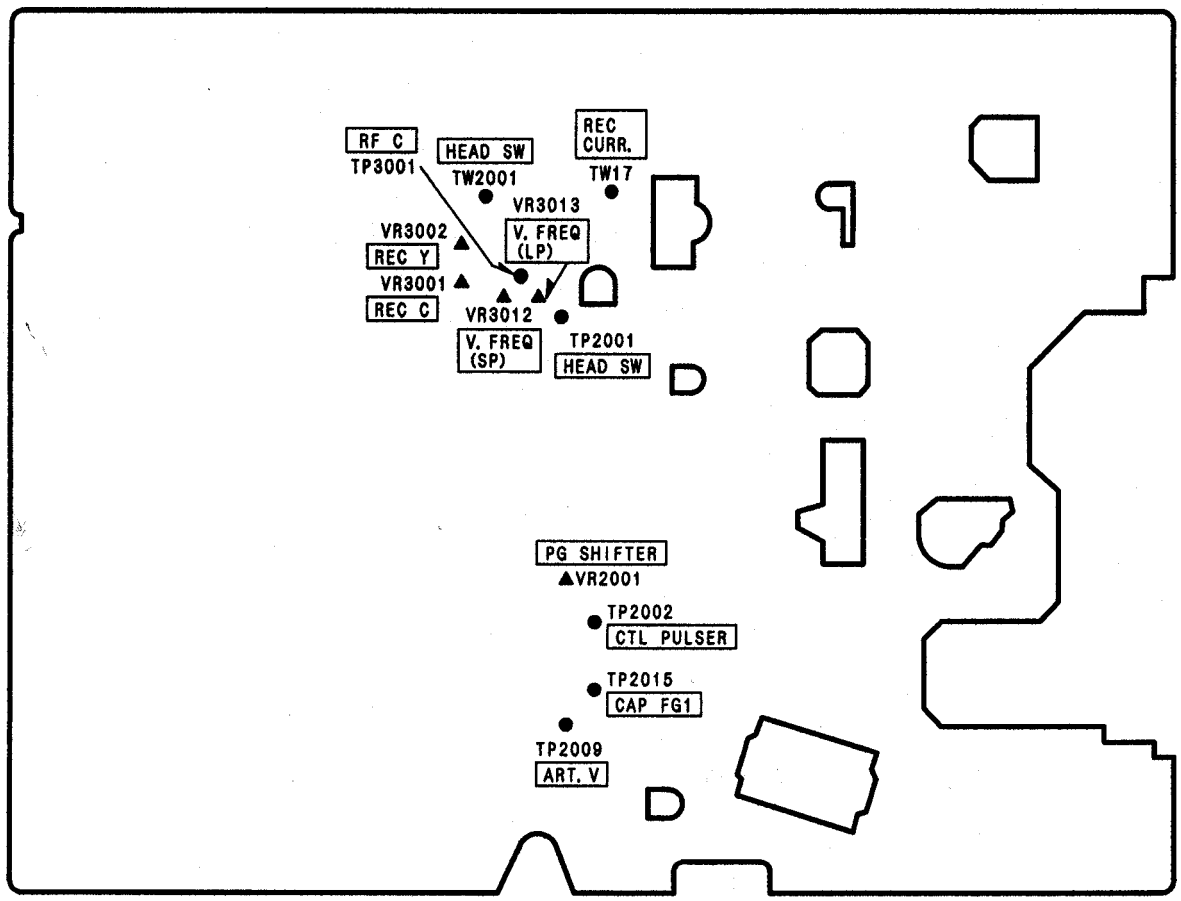
1-3-7. CVC (CRISTAL VIEW CONTROL) FUNCTION

The playback are adjusted to achieve optimum picture quality from tapes with varying charactristics.

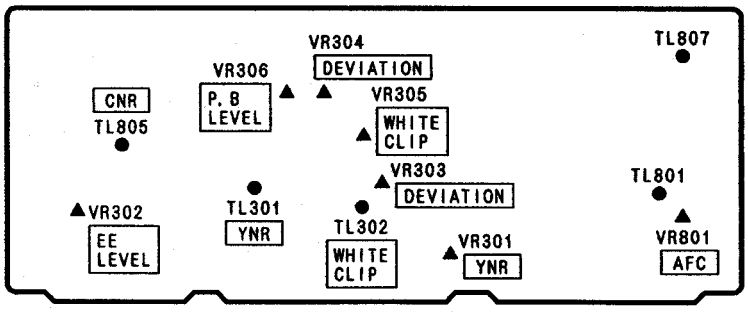
(1) Detail explanation
<Playback mode>
The picture quality is varying from the different tapes as follows:

1) If the output level is low, from worn or rental cassette tapes, a soft picture is obtained by the RF equlizer and picture control on the Lumi./Chro. Pack C.B.A.
2) If the output level is medium, from normal tapes, a sharp picture is obtained from the emphasis and picture control on the Lumi./Chro. Pack C.B.A.
3) If the output level is high, from HG/S tapes, a sharp and detailed picture is obtained from the RF equlizer, emphasis picture control and noise canceller on the Lumi./Chro. Pack C.B.A.

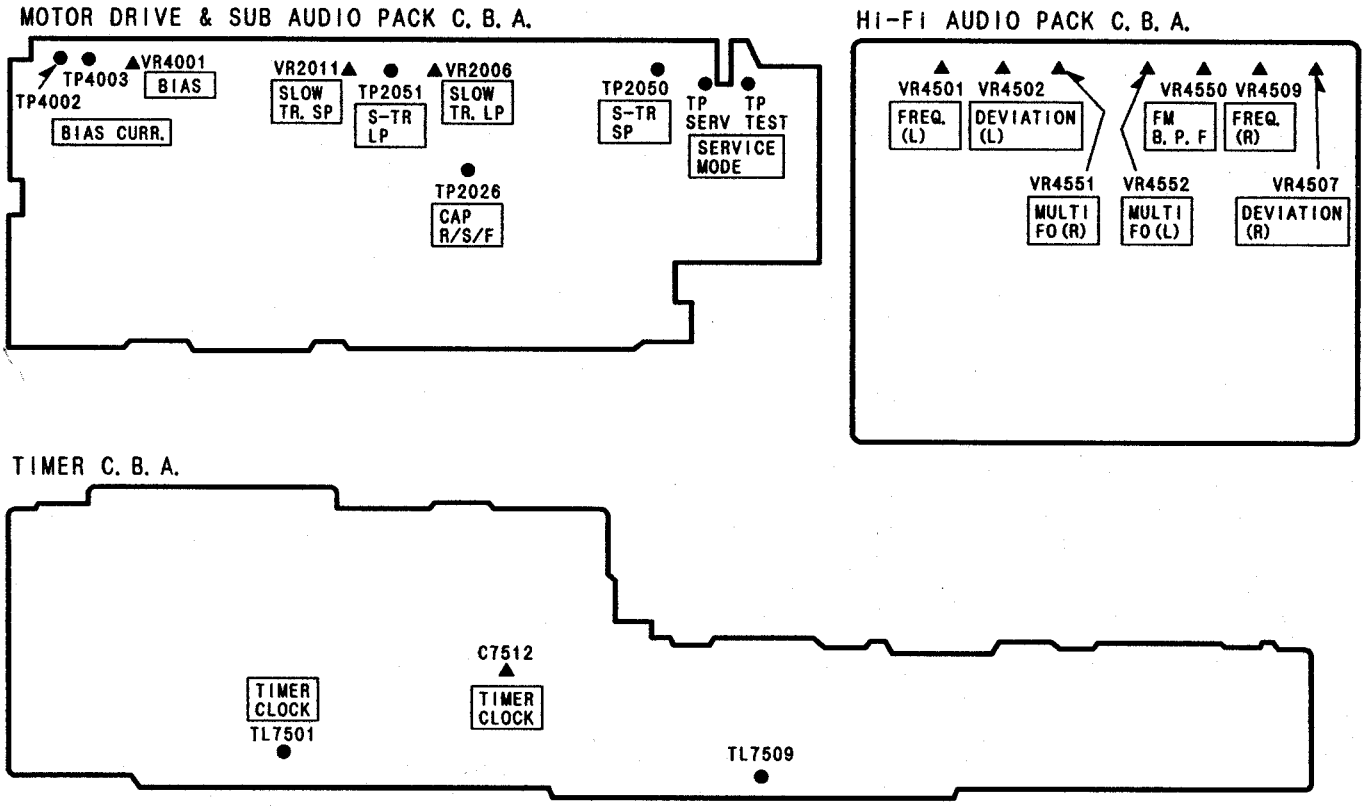
MAIN C. B. A.



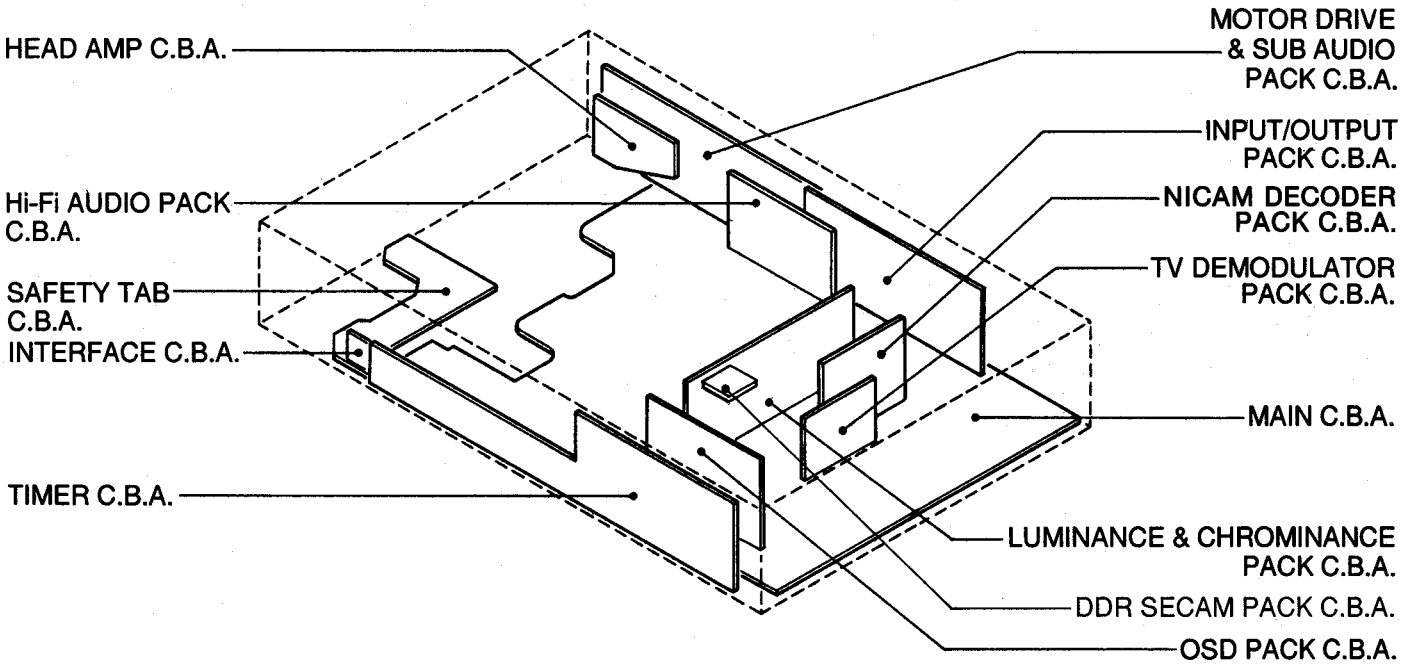
LUMINANCE & CHROMINANCE PACK C. B. A.



DDR SECAM PACK C. B. A.



CIRCUIT BOARD LAYOUT



2-5. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-5-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

1. Dual-Trace Oscilloscope. (More than 35MHz)
   Voltage Range: 0.005-5V/div
   Frequency Range: DC-35MHz
   Probes: 10:1 OR 1:1
2. Frequency Counter.
   Frequency Range: 0-10MHz
   Probes: 1:1
3. Universal Counter.
4. Digital Volt Meter. (D.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFJ8125H3F)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.
12. DC Power Supply.

2-5-2. PREPARATION

During adjustment, set each selector as follows: when no indication in the procedure.

CVC SW .....ON
TAPE SPEED .....SP
CHANNEL.....AV1
TEST SIGNAL SW (REAR) .....OFF

2-5-3. HOW TO READ ADJUSTMENT PROCEDURES

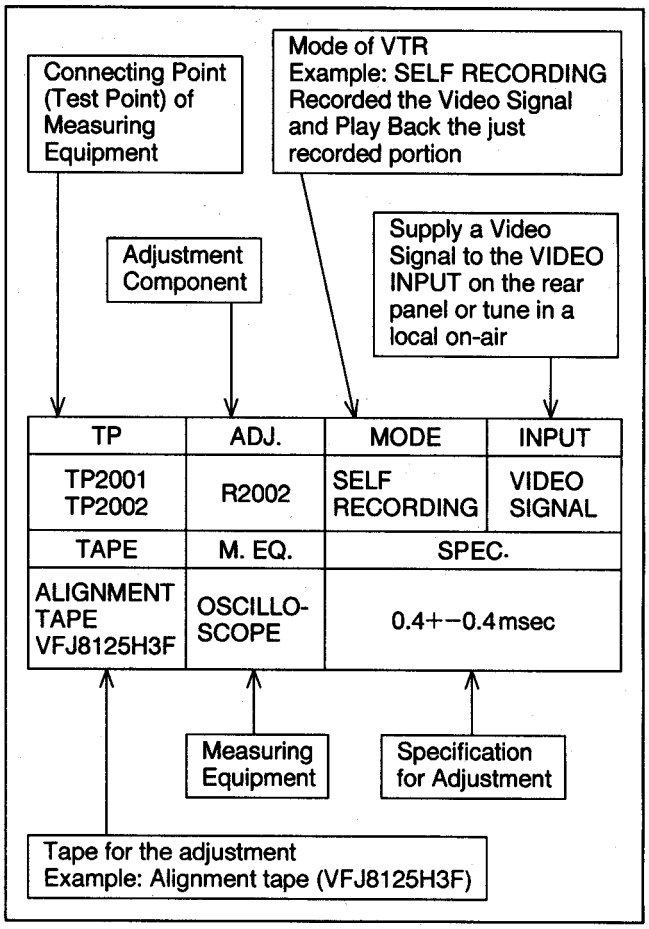


Fig. E1

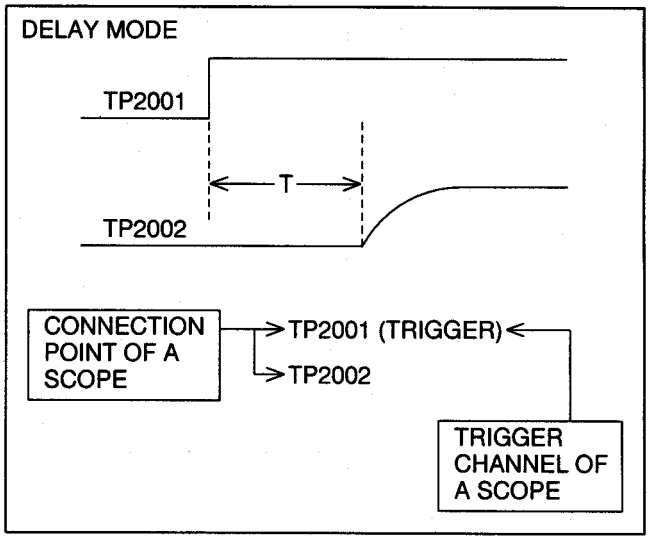


Fig. E2

SERVO SECTION

2-5-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TW2001 VIDEO OUT	VR2001	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	7.0+−0.5 (H)	

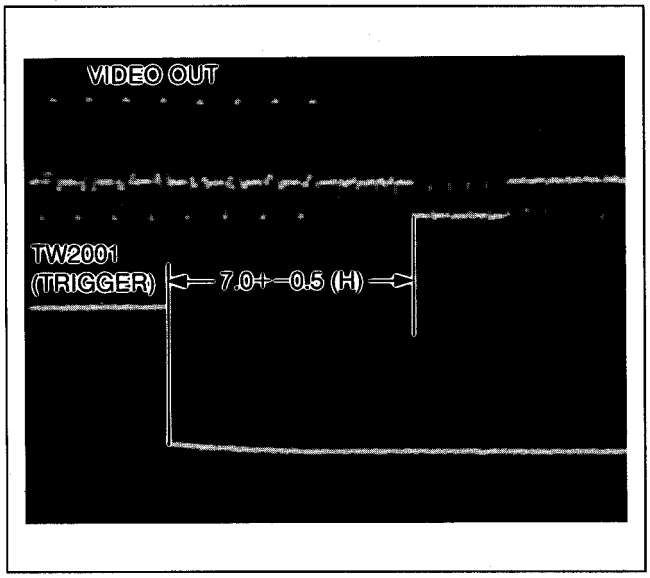


Fig. E3

2-5-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2011 (SP) VR2006 (LP)	(SELF RECORD) SLOW	CCIR PATTERN
TAPE	M. EQ.	SPEC.	
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)	

Note: 1. Before this adjustment, connect a jumper wire which has been cut as shown in Fig. E4 or set the service mode 2 (refer to section 2-2).
2. After connecting a jumper wire or setting the service mode 2, press the TRACKING (+) and (−) buttons on the Remote Controller simultaneously to set the tracking to centre fix position.
3. After this adjustment, disconnect a jumper wire or cancel the service mode.

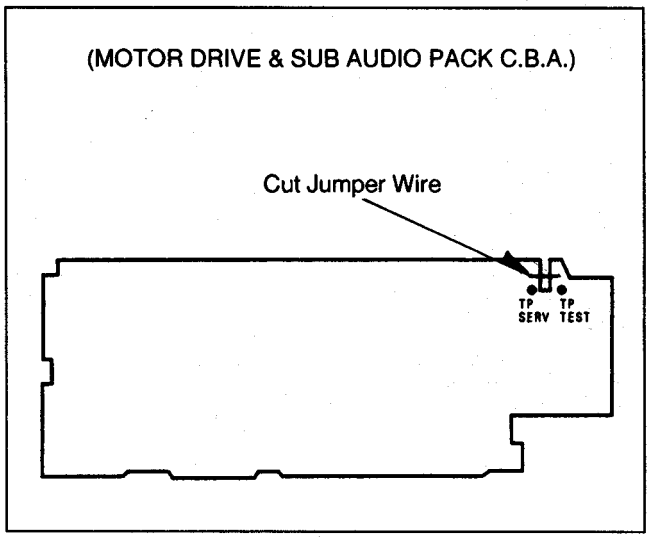


Fig. E4

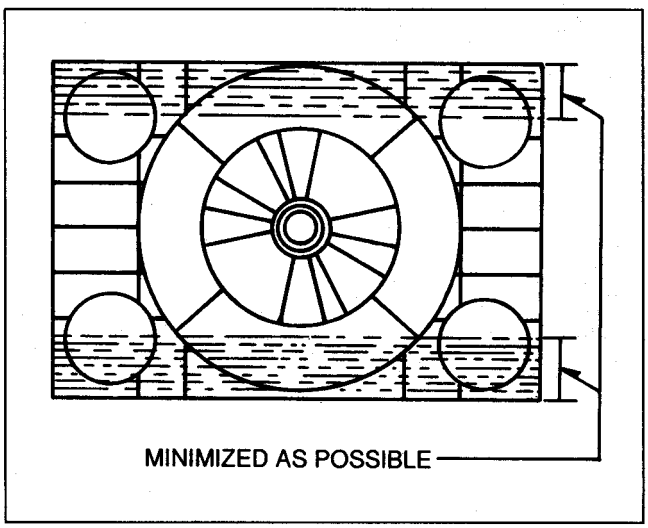


Fig. E5

LUMINANCE & CHROMINANCE SECTION

2-5-6. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TW17	VR3002 (Y) VR3001 (C)	SP RECORDING	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y=120+−5 (mVp-p) C=38+−2 (mVp-p)	

Note: 1. Adjust the Luminance level until the peak level of V-SYNC is 120+−5mVp-p.

2. When adjusting the Chrominance level, Supply +5V DC to Pin 6 of PP3001 to eliminate Luminance component.

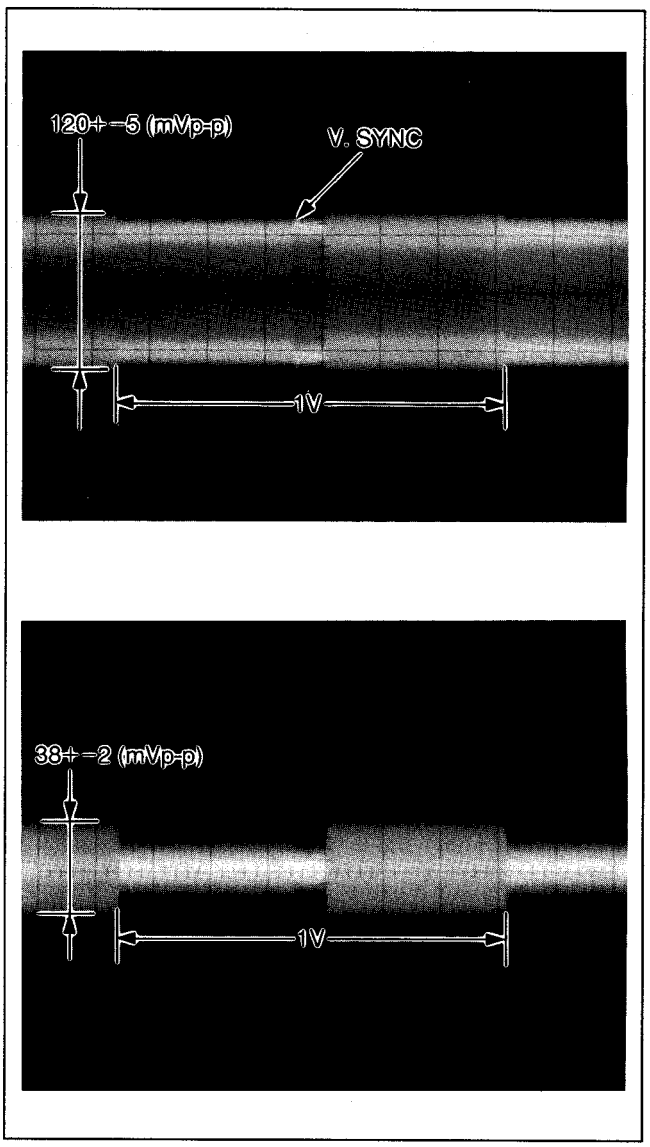


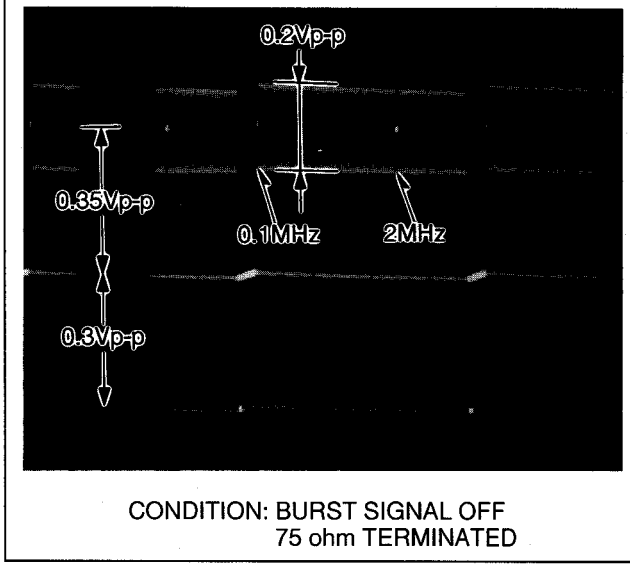
Fig. E6

2-5-7. VIDEO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3012 (SP) VR3013 (LP)	SP/LP (SELF RECORD) PLAYBACK	VIDEO SWEEP SIGNAL (Shown in Fig. E7)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+−1 (dB) (90−110%) LP: 0+−1 (dB) (90−110%)	

Note: 1. Set the Video Sweep Signal as shown in Fig. E7.

2. Set the CVC SW to OFF position.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E7

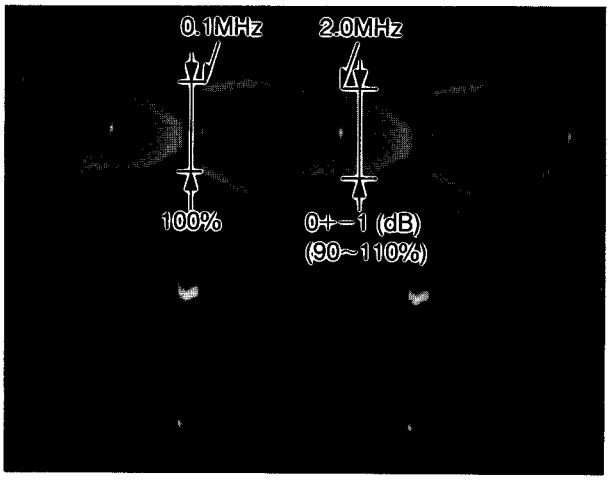


Fig. E8

2-5-8. EE LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR302	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	Y: 2.0+−0.1 Vp-p	

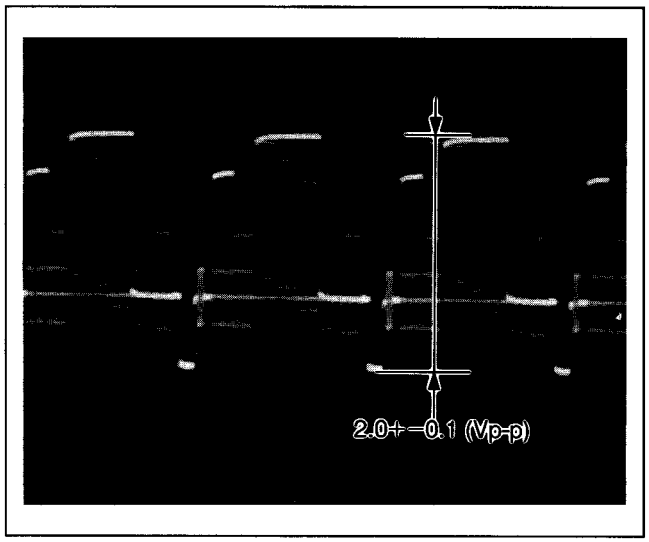


Fig. E9

2-5-9. WHITE CLIP ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC302-80 (TL302)	VR305	RECORDING	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	WHITE CLIP LEVEL: 185+−3%	

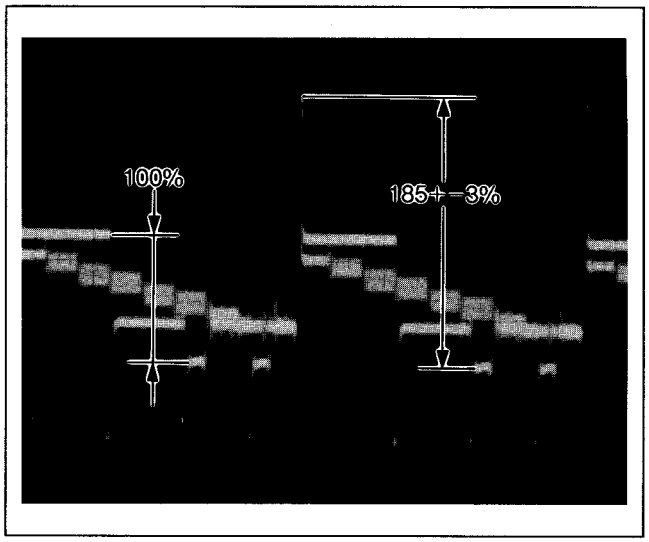


Fig. E10

2-5-10. PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR306	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	Y: 2.0+−0.1 Vp-p CYAN: 1.1+−0.3 Vp-p	

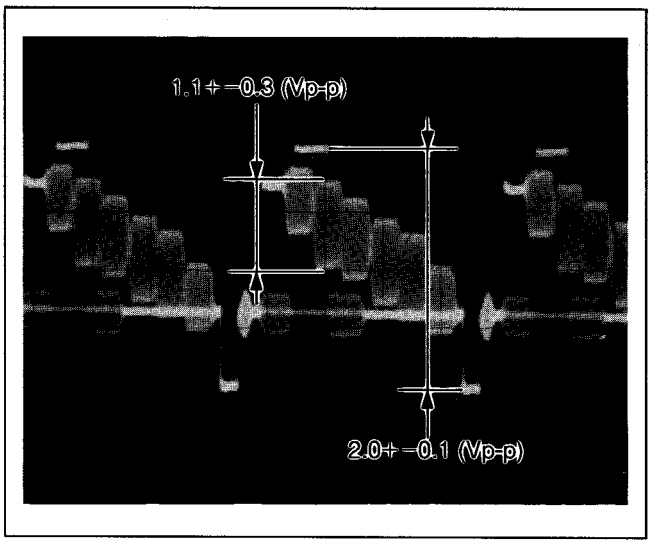


Fig. E11

2-5-11. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR303 VR304	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y: 2.0+−0.1 (Vp-p) (VIDEO: SYNC=70 : 30)	

Note: 1. Before this adjustment, the PLAYBACK LEVEL ADJUSTMENT (2-5-10) must be done.
2. Record the colour bar signal and adjust VR303 and VR304 during recording.
3. Playback the just recorded portion and confirm the playback Y-signal level is 2.0+−0.1 Vp-p.
4. If the signal level is out of the specification, repeat 2 and 3 until the signal level is the specification.

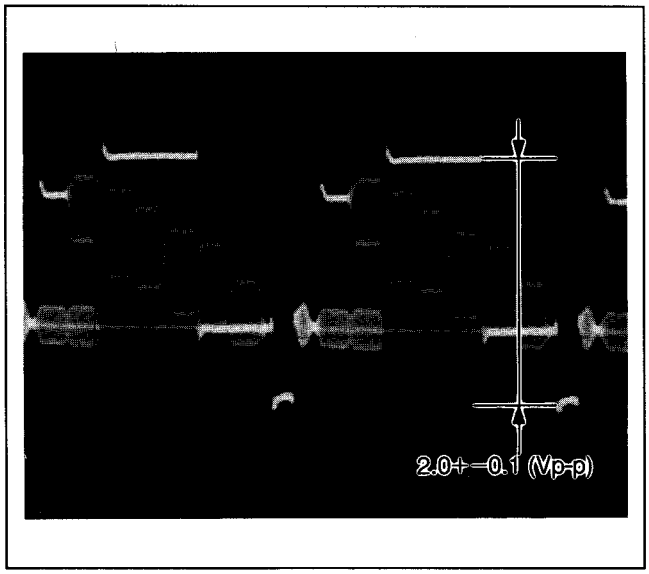


Fig. E12

2-5-12. YNR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC302-71 (TL301)	VR301	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMUM	

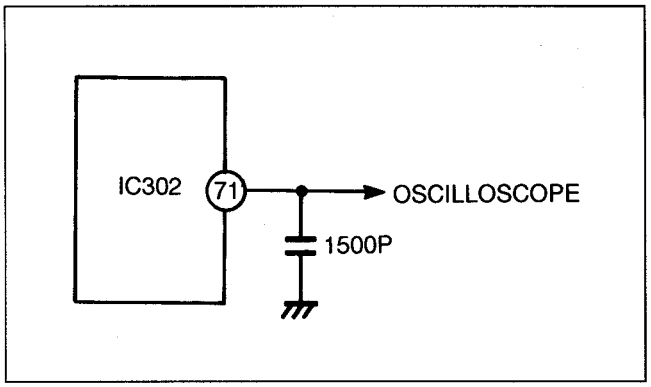


Fig. E13

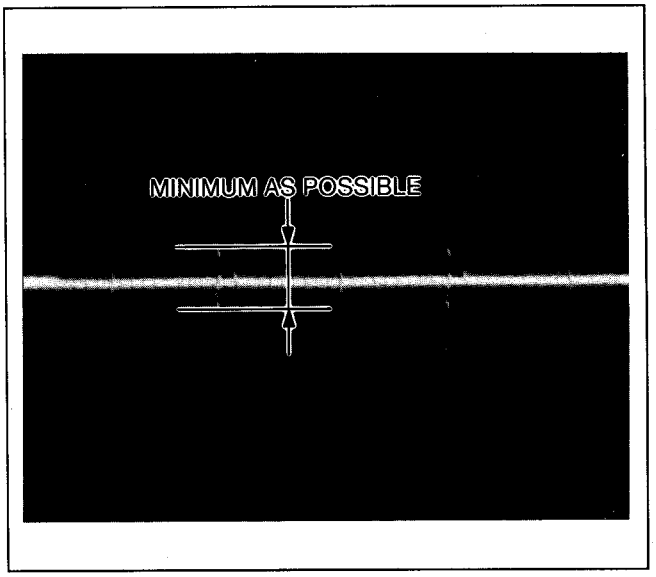


Fig. E14

2-5-13. AFC FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-9 (TL801)	VR801	STOP	
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	15735+−100 (Hz)	

Note: 1. Supply +5V DC to IC801-27 (TL807).
2. Turn VR801 to maximum frequency, then adjust VR801 until the specification.

2-5-14. SECAM KILLER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC881-11	T881	SP RECORDING	SECAM COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	MINIMIZE AMPLITUDE ("A" PORTION: NEGATIVE PEAK)	

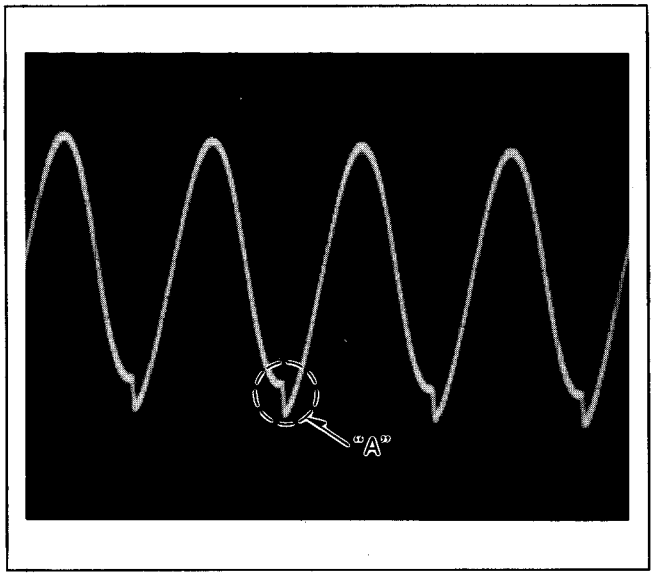


Fig. E15

AUDIO SECTION

2-5-15. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT) TP4003 (GND)	VR4001	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	D.V.M.	2.6+−0.1 (mVrms)	

Note: 1. Connect the Audio Input and GND.

2-5-16. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4501 (NTSC-L) VR4509 (NTSC-R) VR4551 (PAL-L) VR4552 (PAL-R)	SP RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	FREQUENCY COUNTER	NTSC-L: 1.3+−0.003 (MHz) NTSC-R: 1.7+−0.003 (MHz) PAL-L: 1.4+−0.003 (MHz) PAL-R: 1.8+−0.003 (MHz)	

Note: 1. When adjusting the NTSC mode, connect a jumper wire between PP3002-2 and GND.
2. When adjusting the PAL mode, disconnect a jumper wire.

2-5-17. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 and R4511 (L) BETWEEN VR4507 and R4561 (R)	VR4502 (L) VR4507 (R)	SP RECORDING	SINEWAVE 1KHz/−10dB (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M./ SINEWAVE GENERATOR	120 (mVrms)	

Note: 1. Before recording the sinewave, set the sinewave generator until the audio outputs (L) and (R) of AV1 are 400mVrms.

2-5-18. FM B.P.F. ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (L) IC4501-48 (R)	VR4550	PLAYBACK	SINEWAVE 1.608MHz/ 200mVp-p (PK4003-8)
TAPE	M. EQ.	SPEC.	
NTSC RECORDED TAPE	OSCILLO-SCOPE/ SINEWAVE GENERATOR	Lch (IC4501-33)= Rch (IC4501-48)	

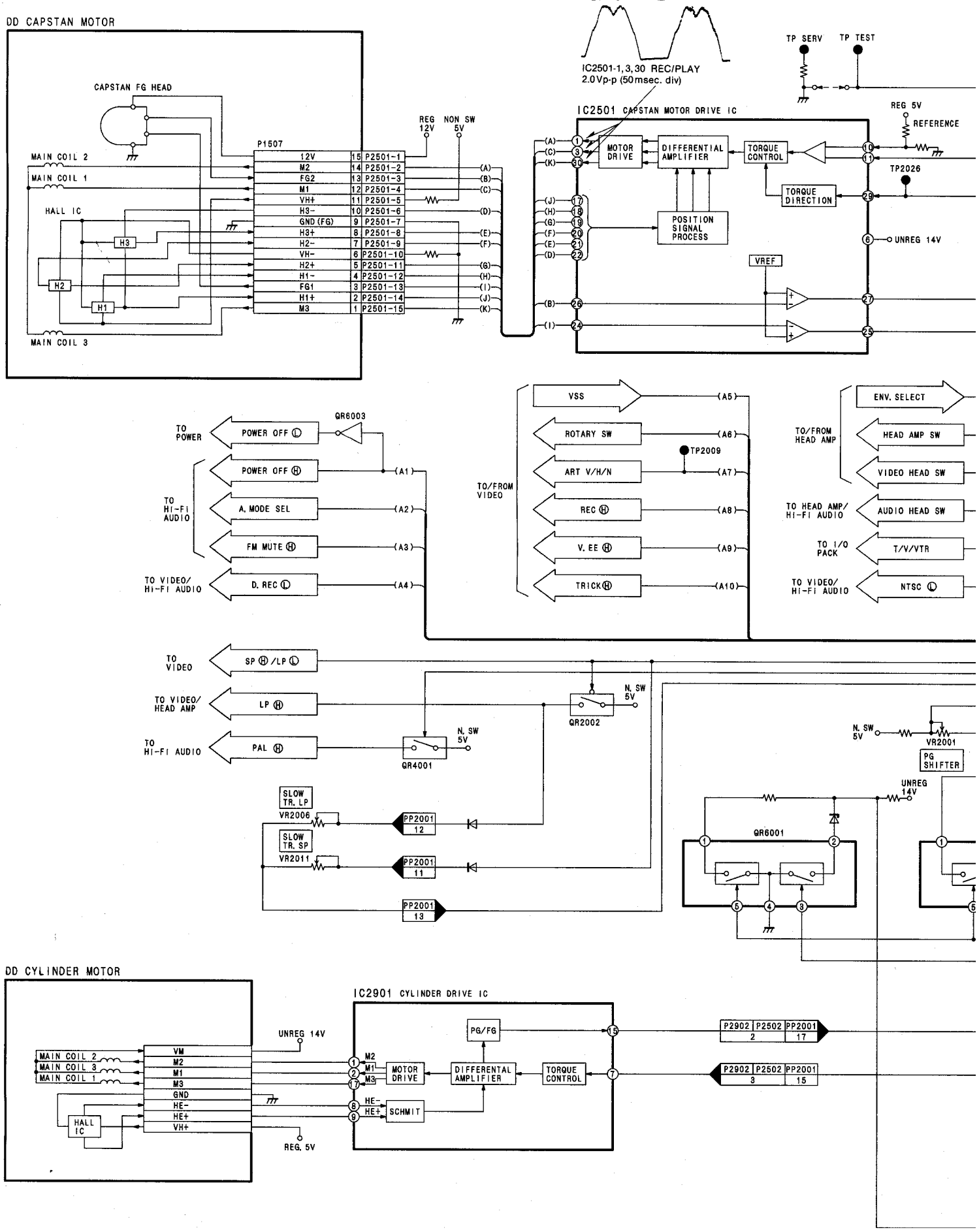
Note: 1. Disconnect P501 (from MAIN C.B.A. to HEAD AMP PACK C.B.A.).
2. The GND lead of oscilloscope must be connected to GND on HIFI AUDIO PACK C.B.A. to reduce the noise.
3. Supply the sinewave signal (1.608MHz/200mVp-p) to PK4003-8.
4. After this adjustment, connect P501.

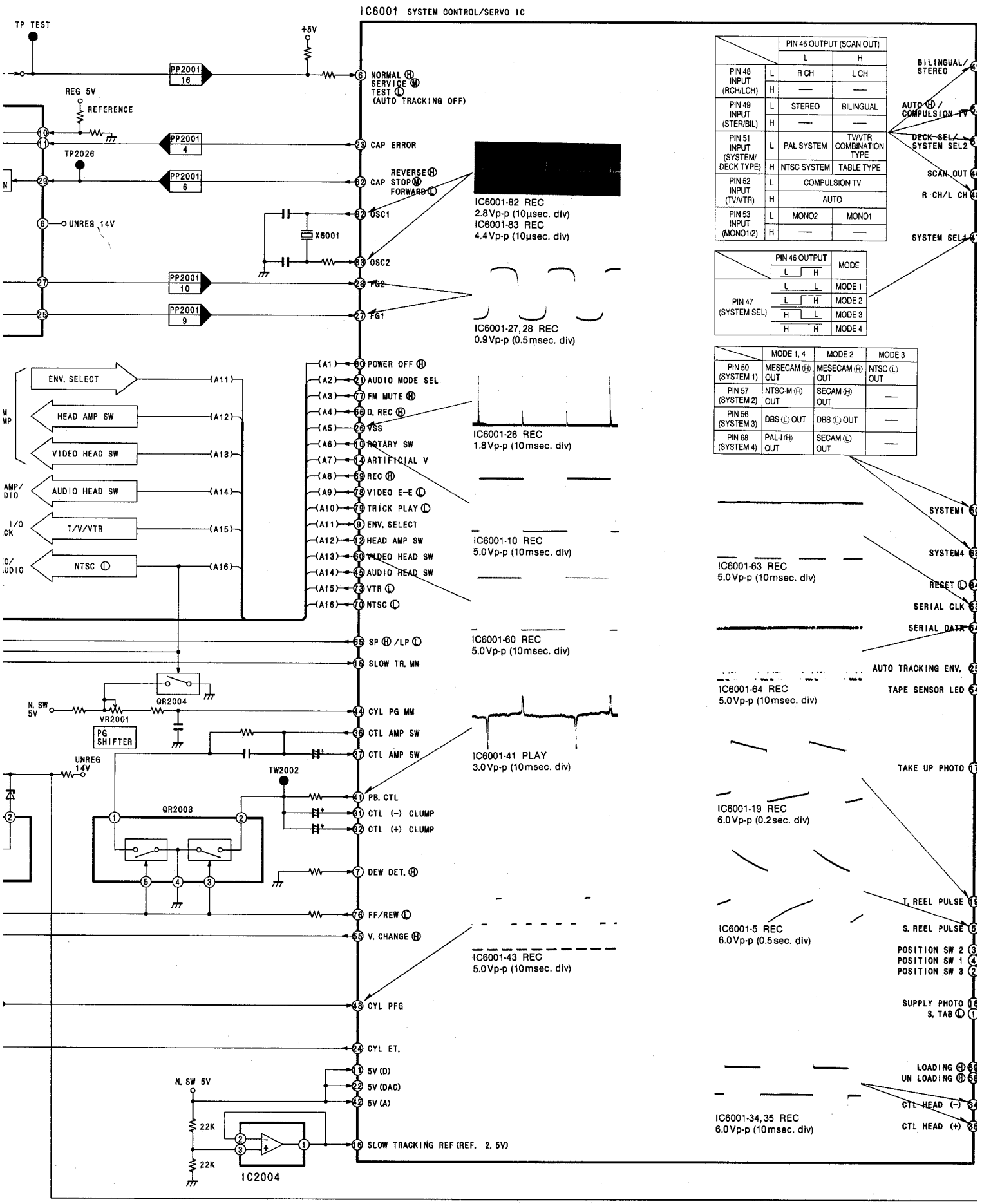
TIMER SECTION

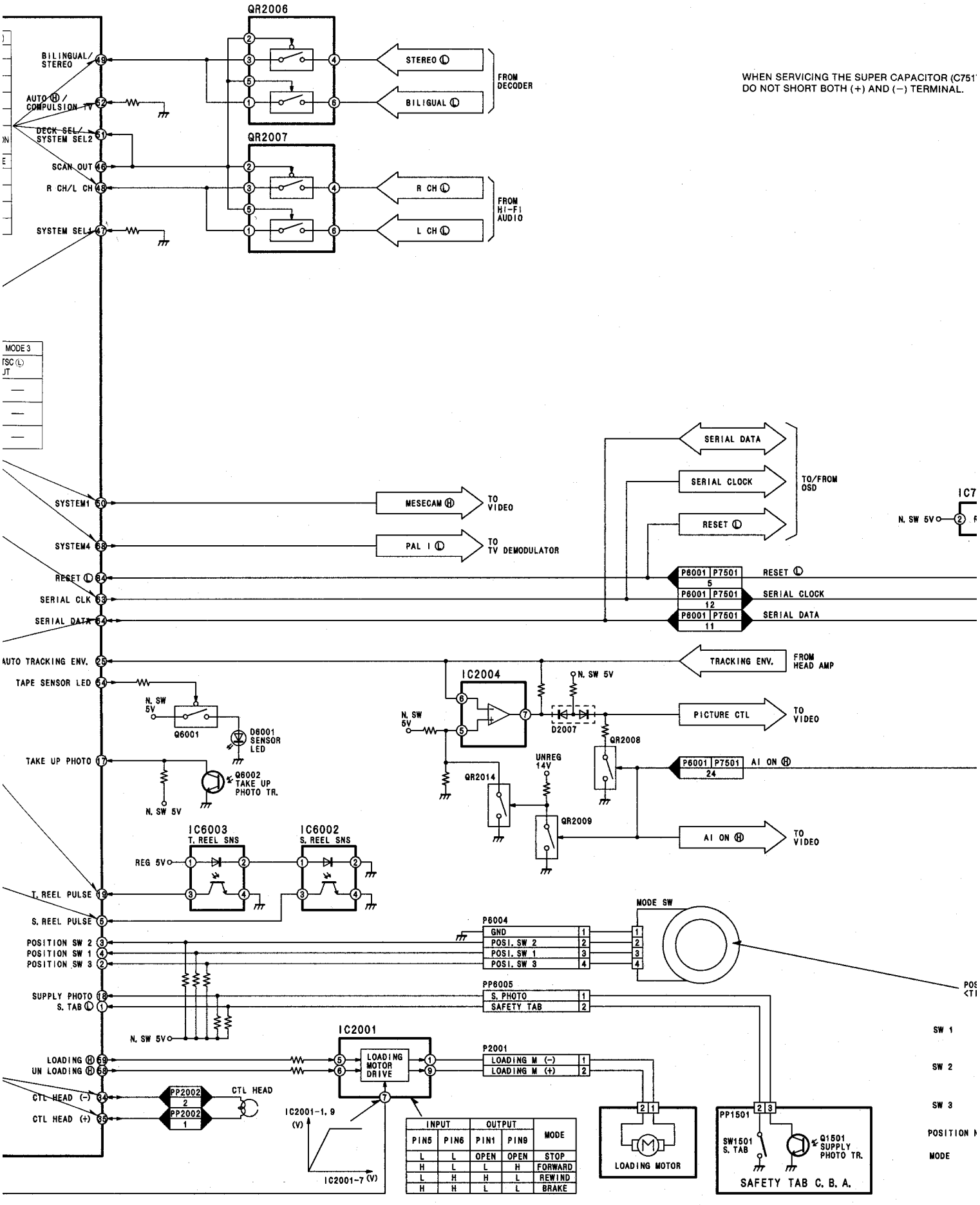
2-5-19. TIMER REFERENCE CLOCK ADJUSTMENT

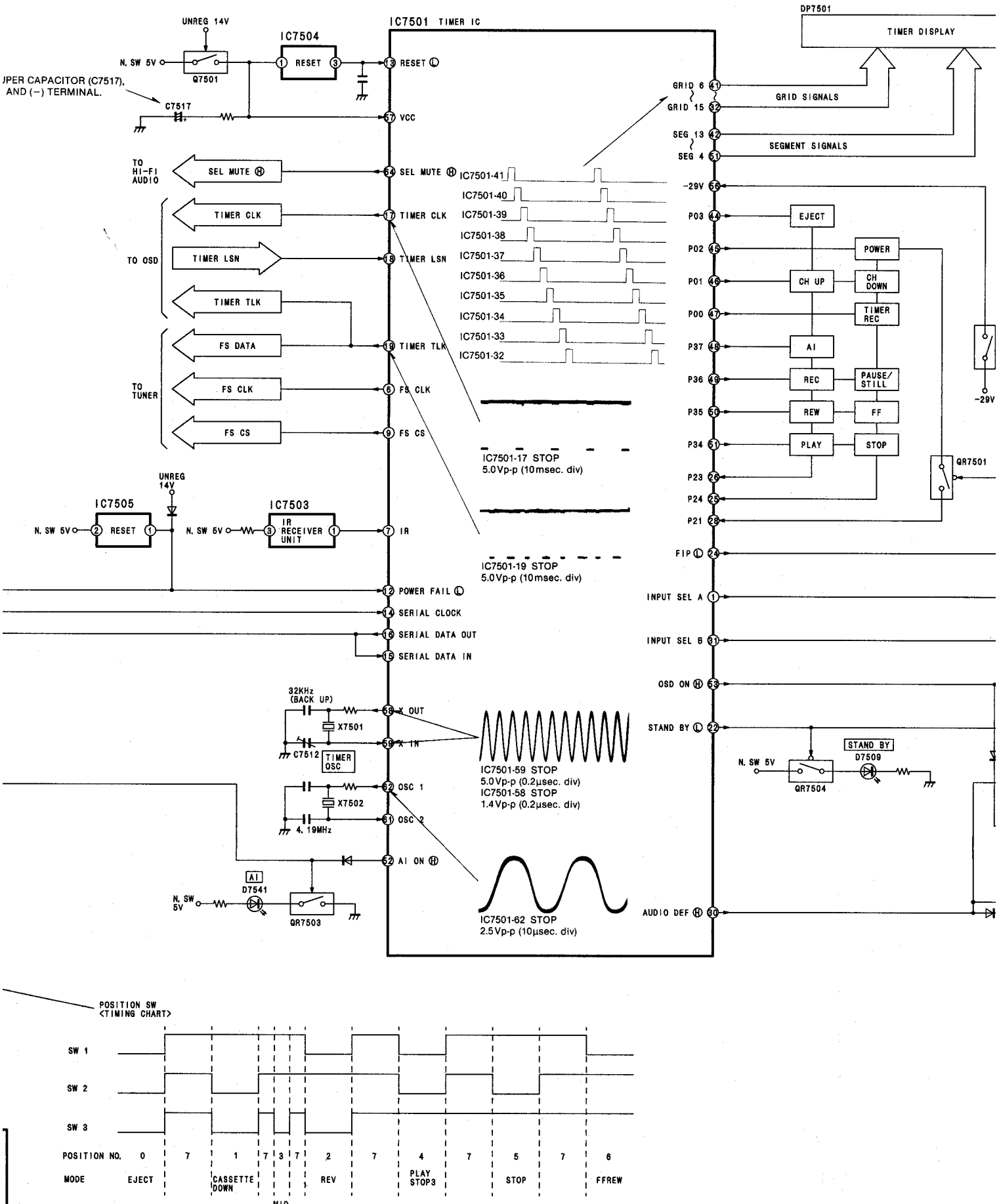
TP	ADJ.	MODE	INPUT
TL7501	C7512	STOP	
TAPE	M. EQ.	SPEC.	
	UNIVERSAL COUNTER	7812.5+−0.015 (usec)	

3-2. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

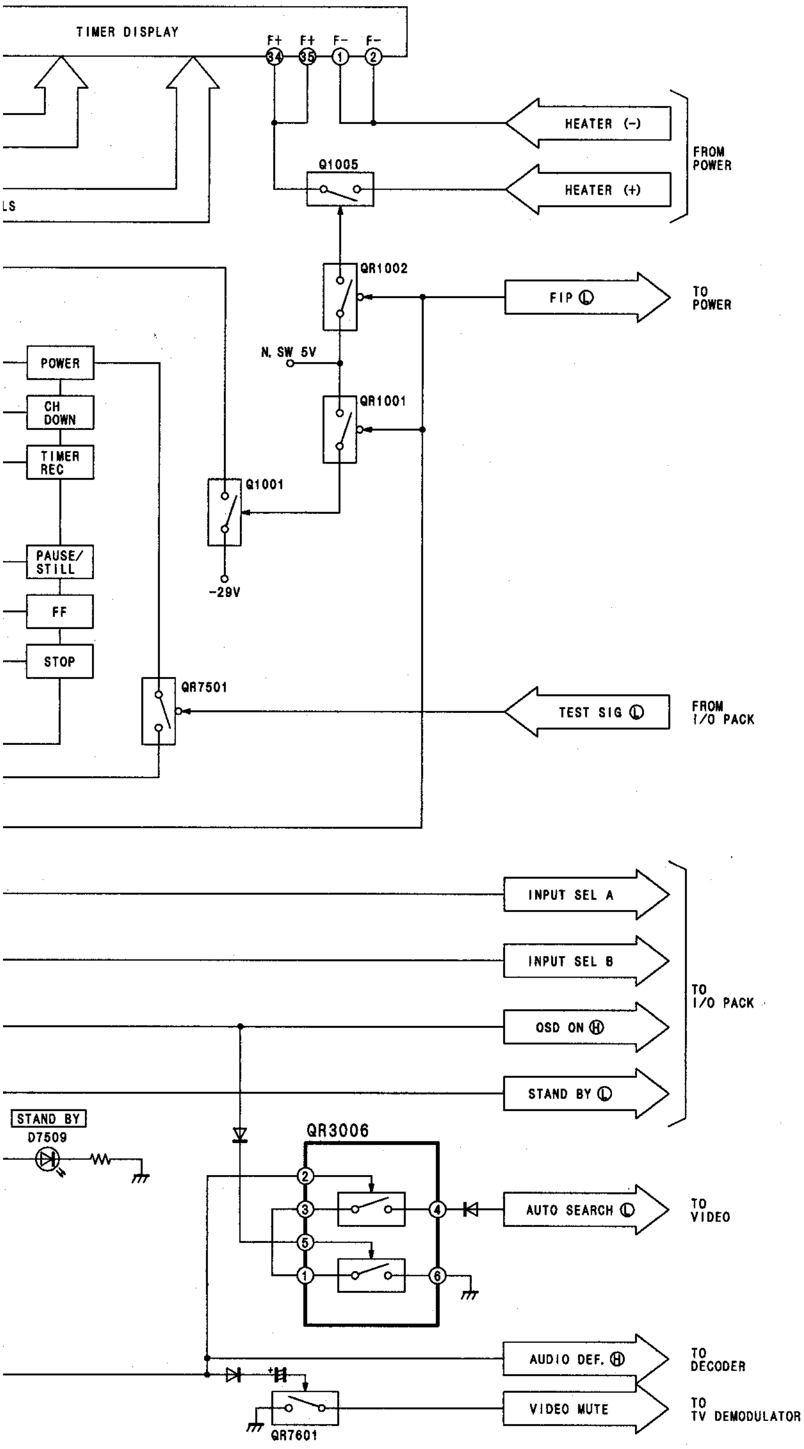



IC6001 SYSTEM CONTROL/SERVO IC
TP TEST
+5V
REG 5V
REFERENCE
TP2026
UNREG 14V
X6001
PP2001 16
PP2001 4
PP2001 6
PP2001 10
PP2001 9
NORMAL (H) SERVICE (M) TEST (L) (AUTO TRACKING OFF)
CAP ERROR
REVERSE (H) CAP STOP (M) FORWARD (L)
OSC1
OSC2
FG2
FG1
IC6001-82 REC 2.8Vp-p (10μsec. div)
IC6001-83 REC 4.4Vp-p (10μsec. div)
IC6001-27,28 REC 0.9Vp-p (0.5msec. div)
ENV. SELECT
HEAD AMP SW
VIDEO HEAD SW
AUDIO HEAD SW
T/V/VTR
NTSC (L)
POWER OFF (H)
AUDIO MODE SEL
FM MUTE (H)
D. REC (H)
VSS
ROTARY SW
ARTIFICIAL V
REC (H)
VIDEO E-E (L)
TRICK PLAY (L)
ENV. SELECT
HEAD AMP SW
VIDEO HEAD SW
AUDIO HEAD SW
VTR (L)
NTSC (L)
IC6001-26 REC 1.8Vp-p (10msec. div)
IC6001-10 REC 5.0Vp-p (10msec. div)
IC6001-60 REC 5.0Vp-p (10msec. div)
SP (H) /LP (L)
SLOW TR. MM
N. SW 5V
VR2001
QR2004
PG SHIFTER
CYL PG MM
CTL AMP SW
CTL AMP SW
IC6001-41 PLAY 3.0Vp-p (10msec. div)
UNREG 14V
TW2002
QR2003
PB. CTL
CTL (-) CLUMP
CTL (+) CLUMP
DEW DET. (H)
FF/REW (L)
V. CHANGE (H)
IC6001-43 REC 5.0Vp-p (10msec. div)
CYL PFG
CYL ET.
5V (D)
5V (DAC)
5V (A)
N. SW 5V
22K
22K
IC2004
SLOW TRACKING REF (REF. 2.5V)
PIN 46 OUTPUT (SCAN OUT)
PIN 48 INPUT (RCH/LCH)
PIN 49 INPUT (STER/BIL)
PIN 51 INPUT (SYSTEM/ DECK TYPE)
PIN 52 INPUT (TV/VTR)
PIN 53 INPUT (MONO1/2)
R CH
L CH
STEREO
BILINGUAL
PAL SYSTEM
TV/VTR COMBINATION TYPE
NTSC SYSTEM
TABLE TYPE
COMPULSION TV
AUTO
MONO2
MONO1
BILINGUAL/ STEREO
AUTO (H) / COMPULSION TV
DECK SEL/ SYSTEM SEL2
SCAN OUT
R CH/L CH
SYSTEM SEL1
PIN 47 (SYSTEM SEL)
PIN 46 OUTPUT
MODE
MODE 1
MODE 2
MODE 3
MODE 4
MODE 1, 4
MODE 2
MODE 3
PIN 50 (SYSTEM 1)
PIN 57 (SYSTEM 2)
PIN 56 (SYSTEM 3)
PIN 68 (SYSTEM 4)
MESECAM (H) OUT
NTSC-M (H) OUT
DBS (L) OUT
PAL-I (H) OUT
SECAM (H) OUT
SECAM (L) OUT
NTSC (L) OUT
SYSTEM1
SYSTEM4
IC6001-63 REC 5.0Vp-p (10msec. div)
RESET (L)
SERIAL CLK
SERIAL DATA
AUTO TRACKING ENV.
TAPE SENSOR LED
IC6001-64 REC 5.0Vp-p (10msec. div)
TAKE UP PHOTO
IC6001-19 REC 6.0Vp-p (0.2sec. div)
T. REEL PULSE
S. REEL PULSE
IC6001-5 REC 6.0Vp-p (0.5sec. div)
POSITION SW 2
POSITION SW 1
POSITION SW 3
SUPPLY PHOTO
S. TAB (L)
LOADING (H)
UN LOADING (H)
CTL HEAD (-)
CTL HEAD (+)
IC6001-34,35 REC 6.0Vp-p (10msec. div)


QR2006
QR2007
BILINGUAL/ STEREO
AUTO Ⓗ / COMPULSION TV
DECK SEL/ SYSTEM SEL2
SCAN OUT
R CH/L CH
SYSTEM SEL1
STEREO Ⓛ
BILIGUAL Ⓛ
FROM DECODER
R CH Ⓛ
L CH Ⓛ
FROM HI-FI AUDIO
WHEN SERVICING THE SUPER CAPACITOR (C751
DO NOT SHORT BOTH (+) AND (−) TERMINAL.
MODE 3
SERIAL DATA
SERIAL CLOCK
RESET Ⓛ
TO/FROM OSD
SYSTEM1
SYSTEM4
MESECAM Ⓗ
PAL I Ⓛ
TO VIDEO
TO TV DEMODULATOR
P6001 P7501 5 RESET Ⓛ
P6001 P7501 12 SERIAL CLOCK
P6001 P7501 11 SERIAL DATA
AUTO TRACKING ENV.
TRACKING ENV.
FROM HEAD AMP
TAPE SENSOR LED
N. SW 5V
Q6001
D6001 SENSOR LED
IC2004
D2007
QR2008
PICTURE CTL
TO VIDEO
TAKE UP PHOTO
Q6002 TAKE UP PHOTO TR.
UNREG 14V
QR2014
QR2009
P6001 P7501 24 AI ON Ⓗ
AI ON Ⓗ
IC6003 T. REEL SNS
IC6002 S. REEL SNS
REG 5V
T. REEL PULSE
S. REEL PULSE
MODE SW
P6004
GND
POSI. SW 2
POSI. SW 1
POSI. SW 3
POSITION SW 2
POSITION SW 1
POSITION SW 3
SUPPLY PHOTO
S. TAB Ⓛ
PP6005
S. PHOTO
SAFETY TAB
IC2001
LOADING Ⓗ
UN LOADING Ⓗ
LOADING MOTOR DRIVE
P2001
LOADING M (−)
LOADING M (+)
CTL HEAD (−)
CTL HEAD (+)
PP2002
CTL HEAD
IC2001-1, 9 (V)
IC2001-7 (V)
INPUT PIN5 PIN6 OUTPUT PIN1 PIN9 MODE
L L OPEN OPEN STOP
H L L H FORWARD
L H H L REWIND
H H L L BRAKE
LOADING MOTOR
PP1501
SW1501 S. TAB
Q1501 SUPPLY PHOTO TR.
SAFETY TAB C. B. A.
SW 1
SW 2
SW 3
POSITION
MODE


IC7501 TIMER IC
DP7501
TIMER DISPLAY
UNREG 14V
IC7504
RESET
N. SW 5V
Q7501
C7517
RESET
VCC
GRID 6
GRID 15
GRID SIGNALS
SEG 13
SEG 4
SEGMENT SIGNALS
-29V
TO HI-FI AUDIO
SEL MUTE
TIMER CLK
TO OSD
TIMER LSN
TIMER TLK
FS DATA
TO TUNER
FS CLK
FS CS
IC7501-41
IC7501-40
IC7501-39
IC7501-38
IC7501-37
IC7501-36
IC7501-35
IC7501-34
IC7501-33
IC7501-32
P03
P02
P01
P00
P37
P36
P35
P34
P23
P24
P21
EJECT
POWER
CH UP
CH DOWN
TIMER REC
AI
REC
PAUSE/ STILL
REW
FF
PLAY
STOP
QR7501
IC7501-17 STOP
5.0Vp-p (10msec. div)
IC7501-19 STOP
5.0Vp-p (10msec. div)
IC7505
IC7503
IR RECEIVER UNIT
IR
FIP
POWER FAIL
SERIAL CLOCK
SERIAL DATA OUT
SERIAL DATA IN
INPUT SEL A
INPUT SEL B
OSD ON
STAND BY
32KHz (BACK UP)
X OUT
X7501
X IN
C7512
TIMER OSC
OSC 1
X7502
OSC 2
4. 19MHz
AI ON
IC7501-59 STOP
5.0Vp-p (0.2µsec. div)
IC7501-58 STOP
1.4Vp-p (0.2µsec. div)
STAND BY
D7509
QR7504
AI
D7541
QR7503
IC7501-62 STOP
2.5Vp-p (10µsec. div)
AUDIO DEF
JPER CAPACITOR (C7517), AND (−) TERMINAL.

POSITION SW <TIMING CHART>
SW 1
SW 2
SW 3
POSITION NO. 0 7 1 7 3 7 2 7 4 7 5 7 6
MODE EJECT CASSETTE DOWN MID REV PLAY STOP3 STOP FFREW



SYMBOL	TRUTH VALUE TABLE

INVERTER

(a) → (b)

IN	(a)	H	L
OUT	(b)	L	H

COMPARTOR

(a) +, (b) − → (c)

IN	(a) / (b)	(a)>(b)	(a)<(b)
OUT	(c)	H	L

AND CIRCUIT

(a), (b) → (c)

IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	L	L	H

OR CIRCUIT

(a), (b) → (c)

IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	H	H	H

THREE STATES BUFFER

(a) → (c), control (b)

IN	(a)	H	L	H or L
	(b)	L	L	H
OUT	(c)	H	L	※

※ High Impedance

TR. SW (NPN TYPE)

(C), (E), (B)

BASE	H	L
TR. SW	ON	OFF

TR. SW (PNP TYPE)

(E), (C), (B)

BASE	H	L
TR. SW	OFF	ON

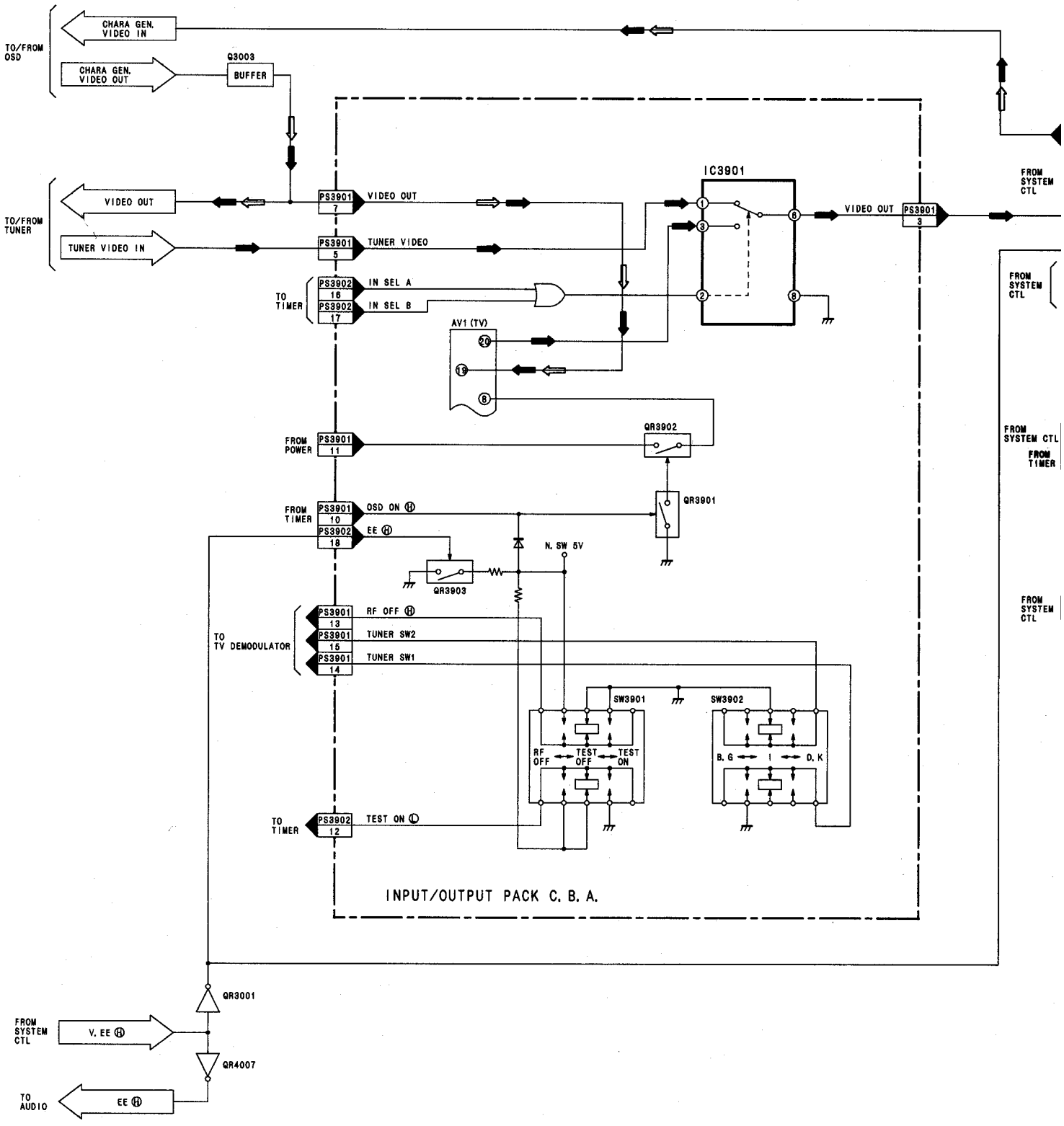
R·S TYPE FLIP·FLOP

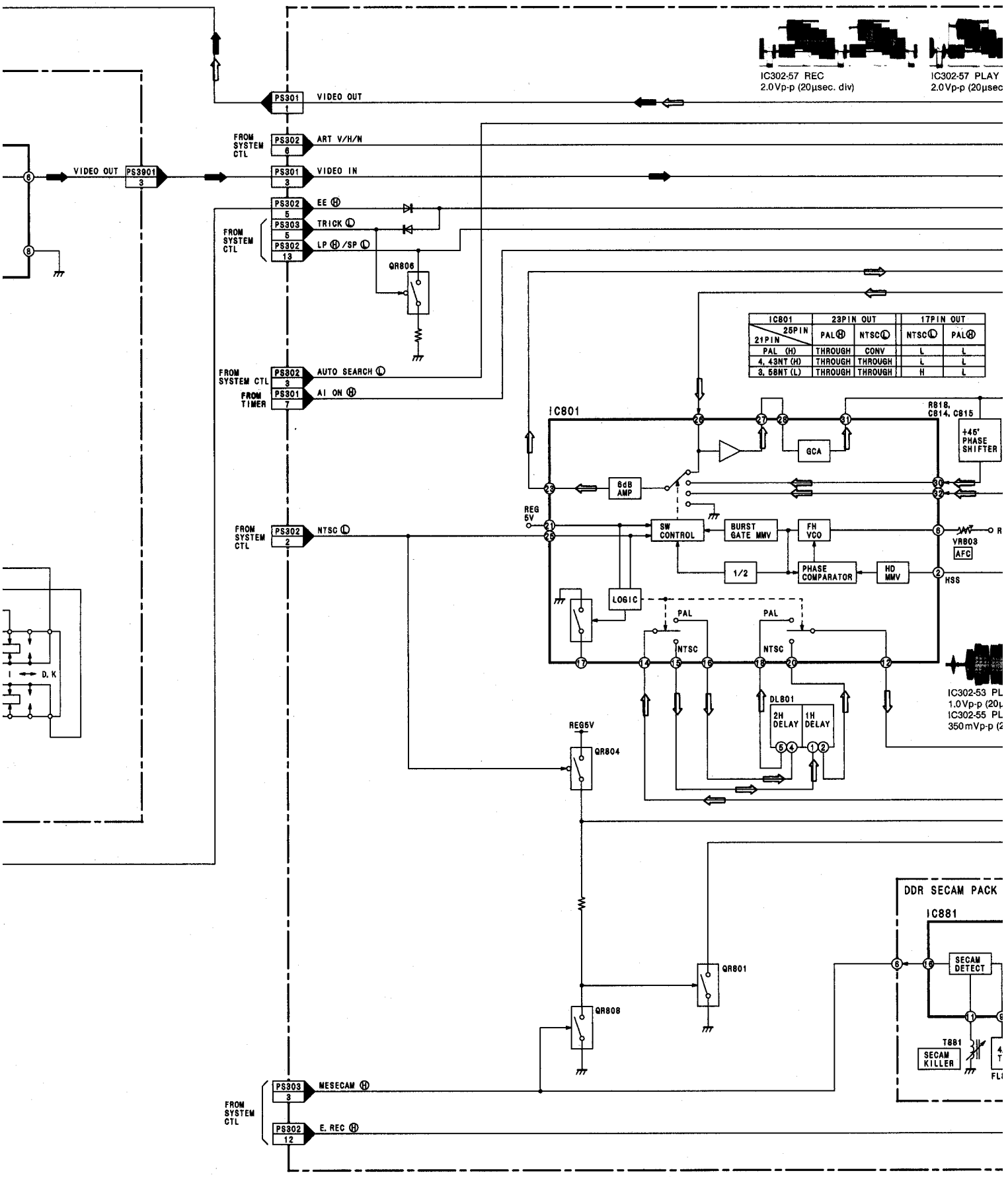
(a) S, (b) R; Q (c), $\bar{Q}$ (d)

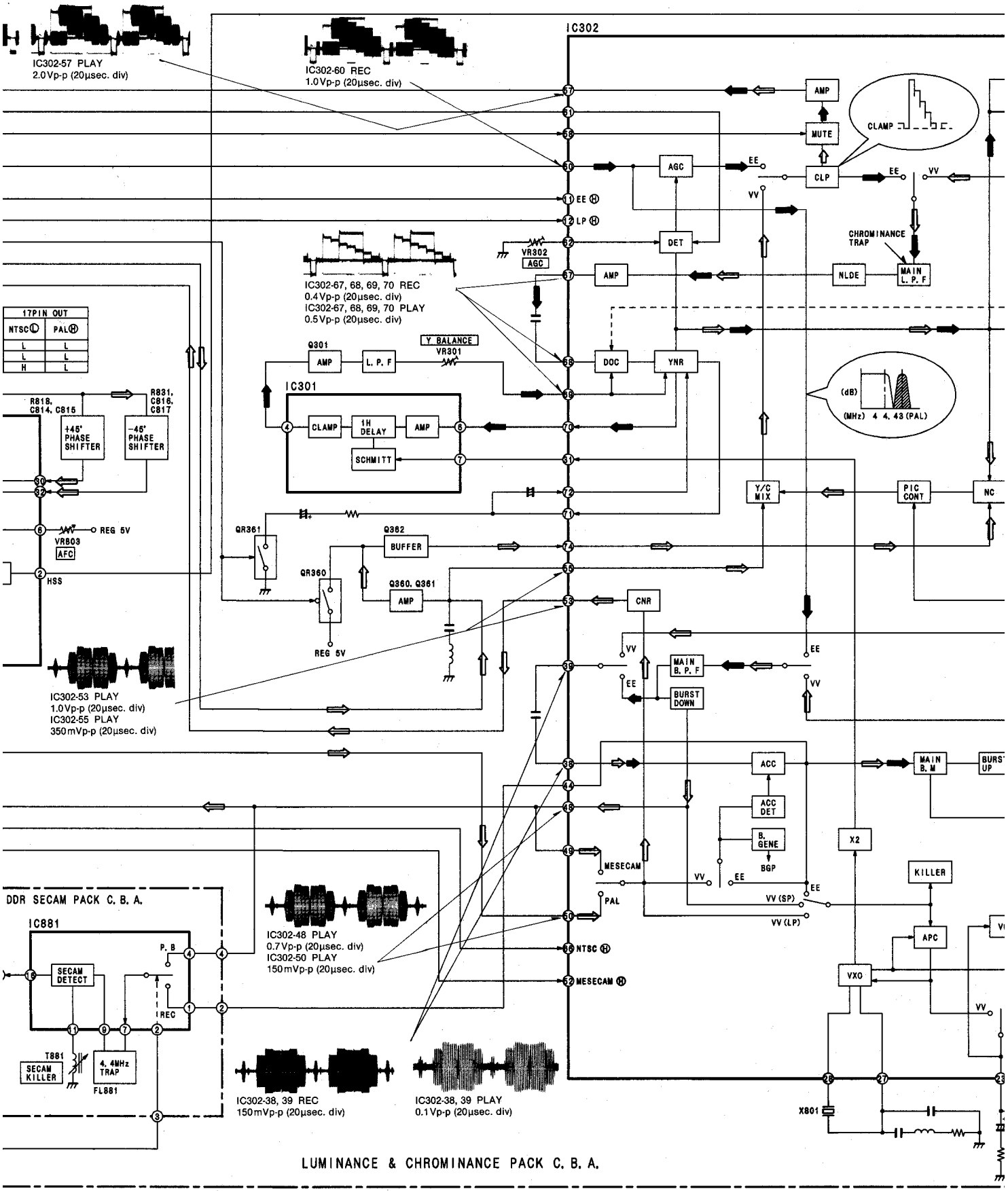
IN	(a)	L	L	⎍
	(b)	L	⎍	L
OUT	(c)	※	L	H
	(d)	◆	H	L

※ Initial condition is maintained.
◆ Initial condition is reversed.

3-3. LUMINANCE & CHROMINANCE BLOCK DIAGRAM

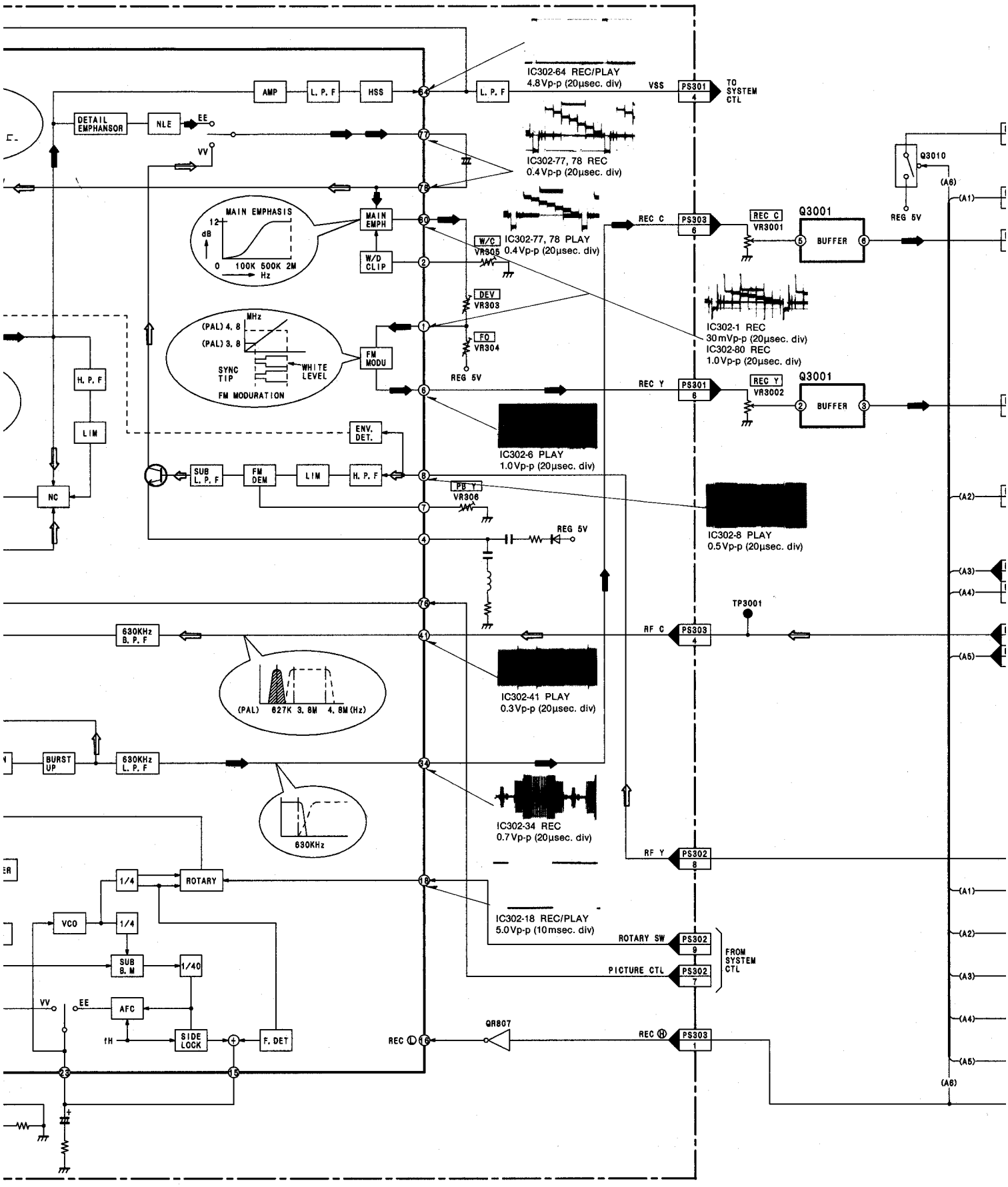



IC302-57 REC
2.0Vp-p (20µsec. div)
IC302-57 PLAY
2.0Vp-p (20µsec
PS301 1 VIDEO OUT
FROM SYSTEM CTL
PS302 6 ART V/H/N
VIDEO OUT PS3901 3
PS301 3 VIDEO IN
PS302 5 EE Ⓗ
FROM SYSTEM CTL
PS303 5 TRICK Ⓛ
PS302 13 LP Ⓗ /SP Ⓛ
QR806
FROM SYSTEM CTL
PS302 3 AUTO SEARCH Ⓛ
FROM TIMER
PS301 7 AI ON Ⓗ
IC801
R818, C814, C815
+45° PHASE SHIFTER
GCA
6dB AMP
REG 5V
FROM SYSTEM CTL
PS302 2 NTSC Ⓛ
SW CONTROL
BURST GATE MMV
FH VCO
VR803
AFC
1/2
PHASE COMPARATOR
HD MMV
HSS
LOGIC
PAL
NTSC
PAL
NTSC
IC801
25PIN / 21PIN
23PIN OUT
17PIN OUT
PAL Ⓗ
NTSC Ⓛ
NTSC Ⓛ
PAL Ⓗ
PAL (H) THROUGH CONV L L
4, 43NT (H) THROUGH THROUGH L L
3, 58NT (L) THROUGH THROUGH H L
IC302-53 PL
1.0Vp-p (20µ
IC302-55 PL
350mVp-p (2
DL801
2H DELAY
1H DELAY
REG5V
QR804
QR801
QR808
DDR SECAM PACK
IC881
SECAM DETECT
T681
SECAM KILLER
FROM SYSTEM CTL
PS303 3 MESECAM Ⓗ
PS302 12 E. REC Ⓗ
D, K

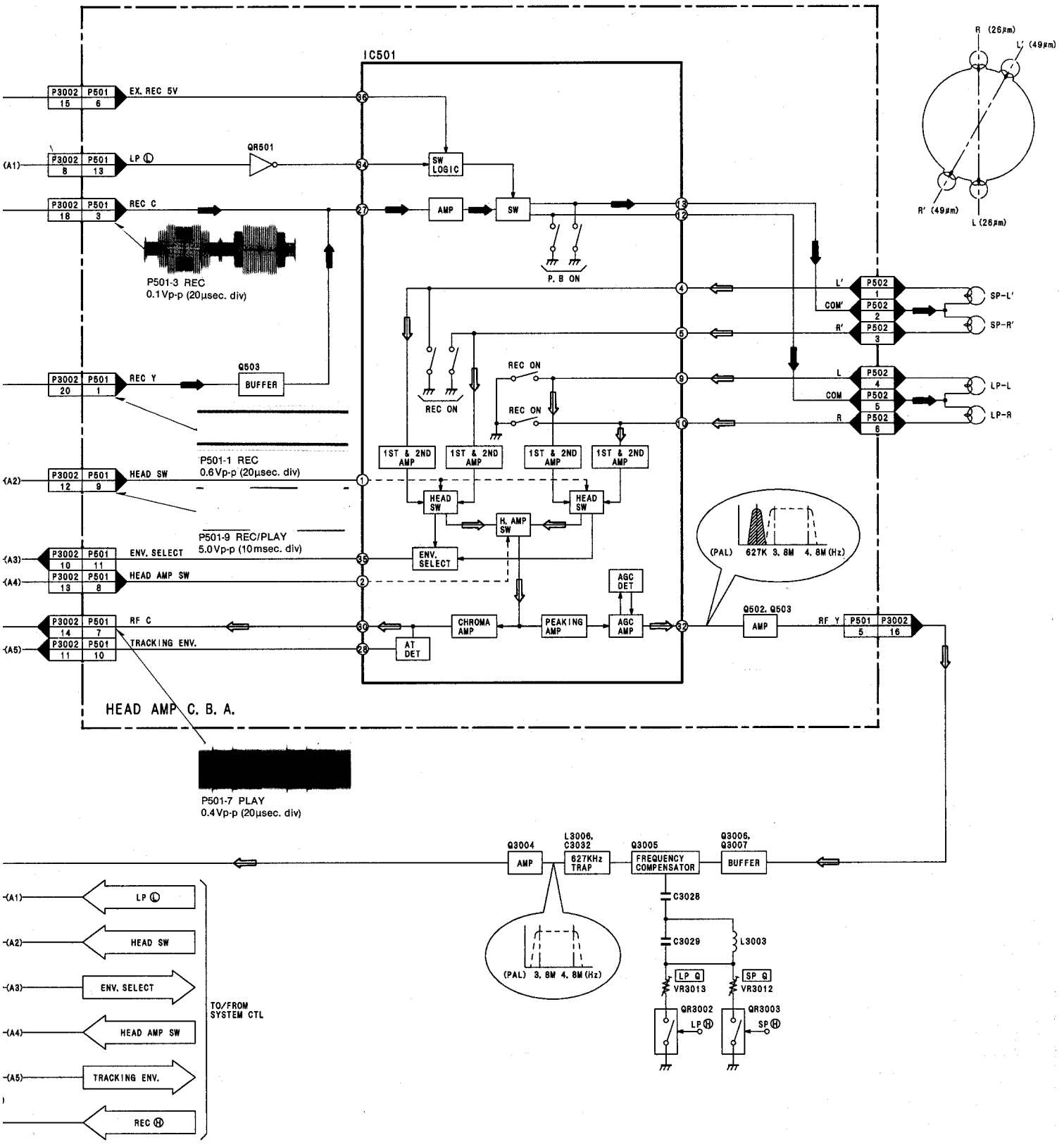


LUMINANCE & CHROMINANCE PACK C. B. A.

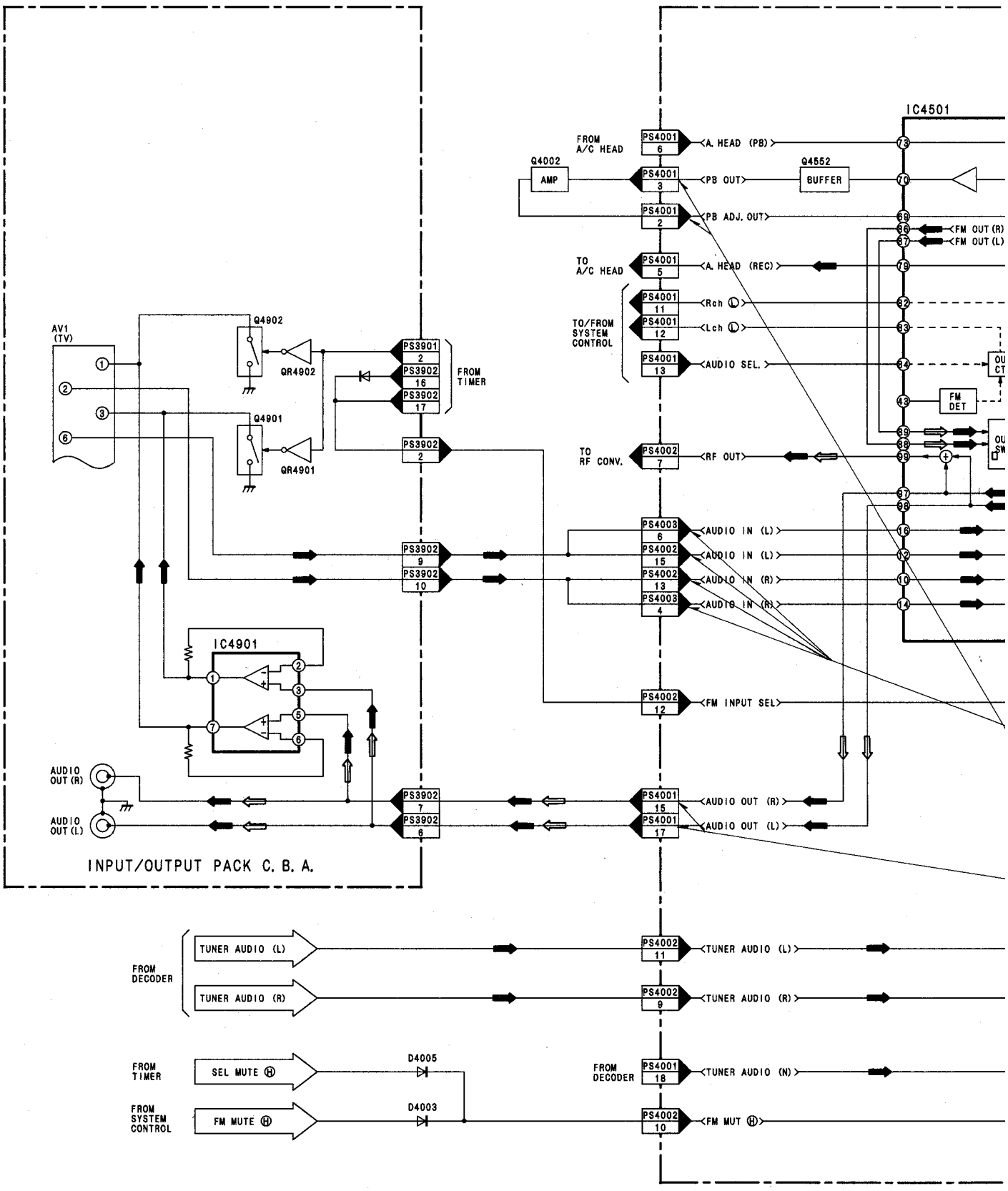
MAIN SIGNAL PATH IN REC MODE

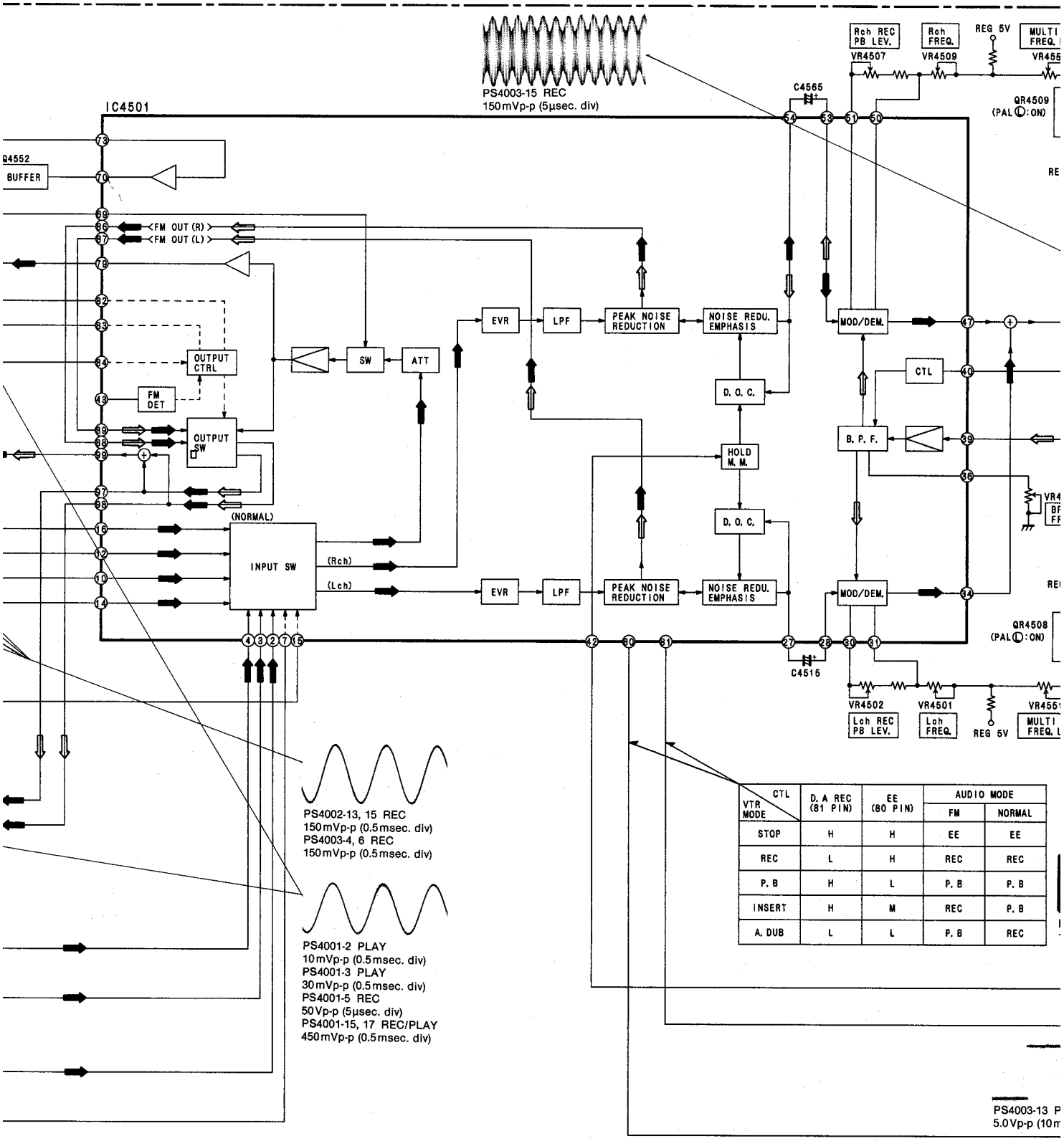


MAIN SIGNAL PATH IN PLAYBACK MODE

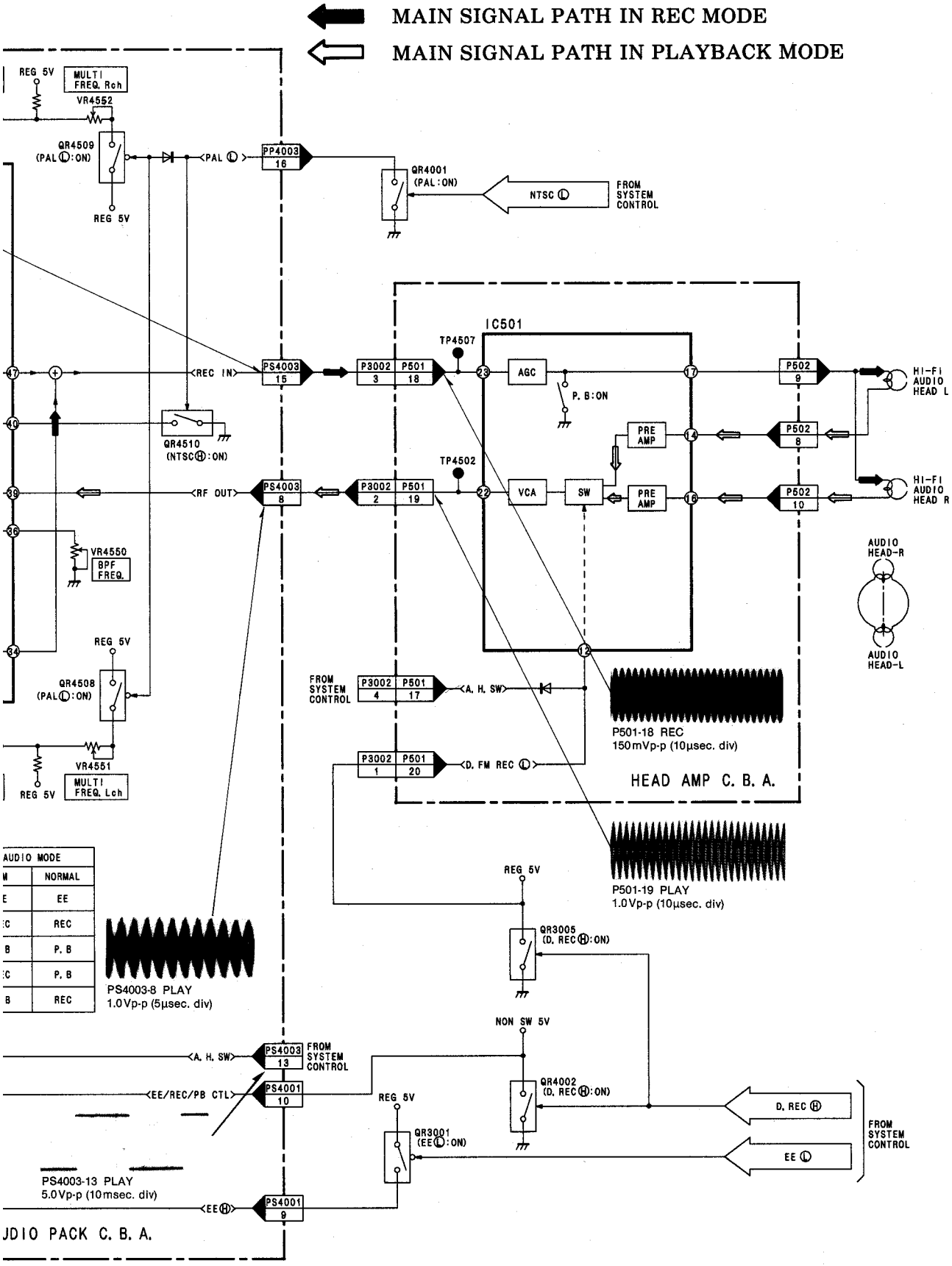


3-4. Hi-Fi AUDIO BLOCK DIAGRAM

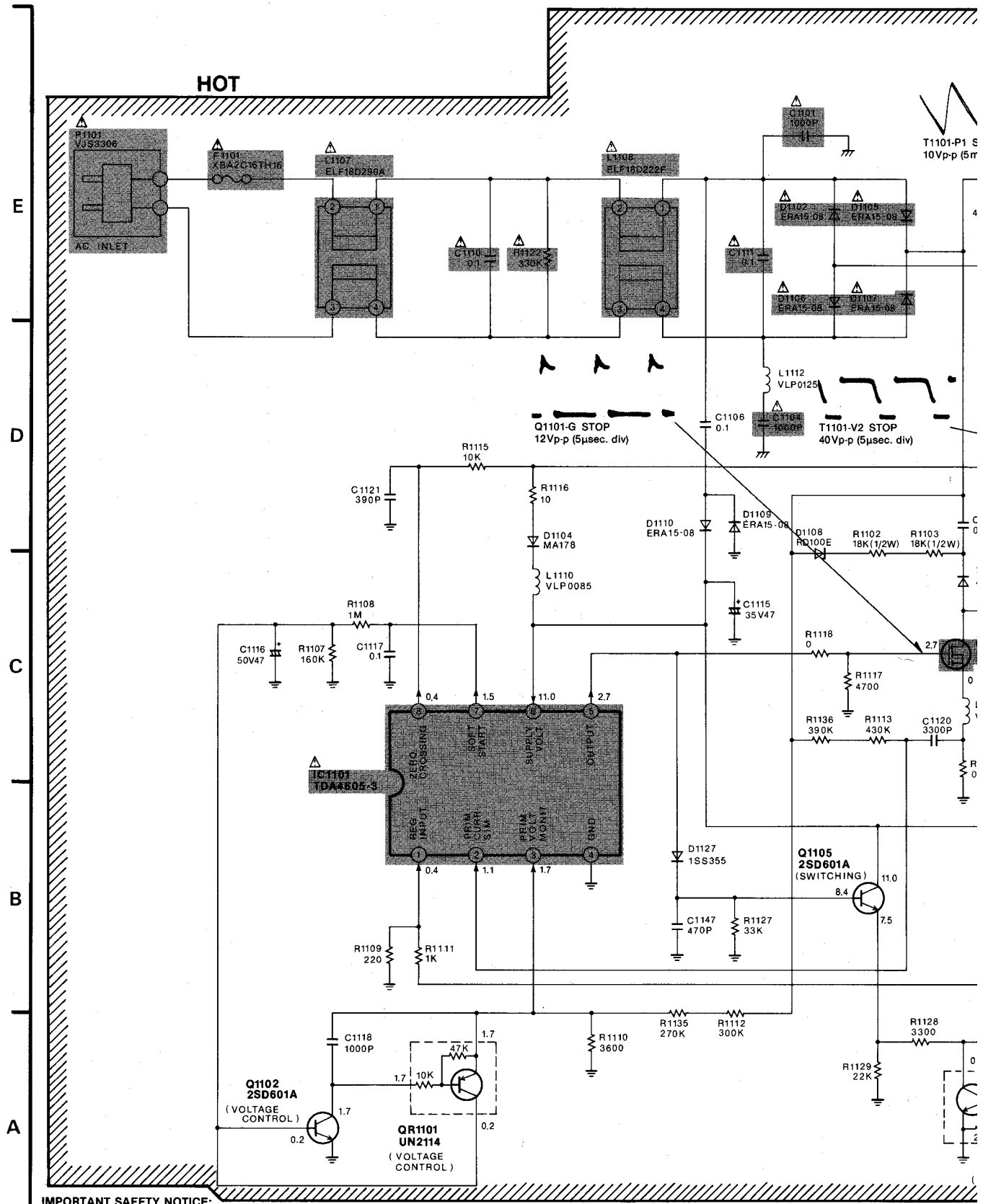




CTL / VTR MODE	D. A REC (81 PIN)	EE (80 PIN)	AUDIO MODE	
			FM	NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P. B	H	L	P. B	P. B
INSERT	H	M	REC	P. B
A. DUB	L	L	P. B	REC


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
REG 5V
MULTI FREQ. Rch
VR4552
QR4509 (PAL Ⓛ:ON)
PP4003 16
<PAL Ⓛ>
QR4001 (PAL:ON)
NTSC Ⓛ
FROM SYSTEM CONTROL
IC501
TP4507
TP4502
<REC IN>
PS4003 15
P3002 3
P501 18
AGC
P. B:ON
P502 9
HI-FI AUDIO HEAD L
PRE AMP
P502 8
QR4510 (NTSC Ⓗ:ON)
<RF OUT>
PS4003 8
P3002 2
P501 19
VCA
SW
PRE AMP
P502 10
HI-FI AUDIO HEAD R
VR4550
BPF FREQ.
AUDIO HEAD-R
AUDIO HEAD-L
REG 5V
QR4508 (PAL Ⓛ:ON)
FROM SYSTEM CONTROL
P3002 4
P501 17
<A. H. SW>
P501-18 REC
150mVp-p (10µsec. div)
P3002 1
P501 20
<D. FM REC Ⓛ>
HEAD AMP C. B. A.
VR4551
MULTI FREQ. Lch
REG 5V
AUDIO MODE
NORMAL
EE
REC
P. B
P. B
REC
P501-19 PLAY
1.0Vp-p (10µsec. div)
REG 5V
QR3005 (D. REC Ⓗ:ON)
PS4003-8 PLAY
1.0Vp-p (5µsec. div)
NON SW 5V
<A. H. SW>
PS4003 13
FROM SYSTEM CONTROL
<EE/REC/PB CTL>
PS4001 10
REG 5V
QR4002 (D. REC Ⓗ:ON)
D. REC Ⓗ
FROM SYSTEM CONTROL
QR3001 (EE Ⓛ:ON)
EE Ⓛ
PS4003-13 PLAY
5.0Vp-p (10msec. div)
<EE Ⓗ>
PS4001 9
JDIO PACK C. B. A.

SECTION 4
SCHEMATIC DIAGRAMS
4-1. POWER SUPPLY SECTION IN MAIN SCHEMATIC DIAGRAM

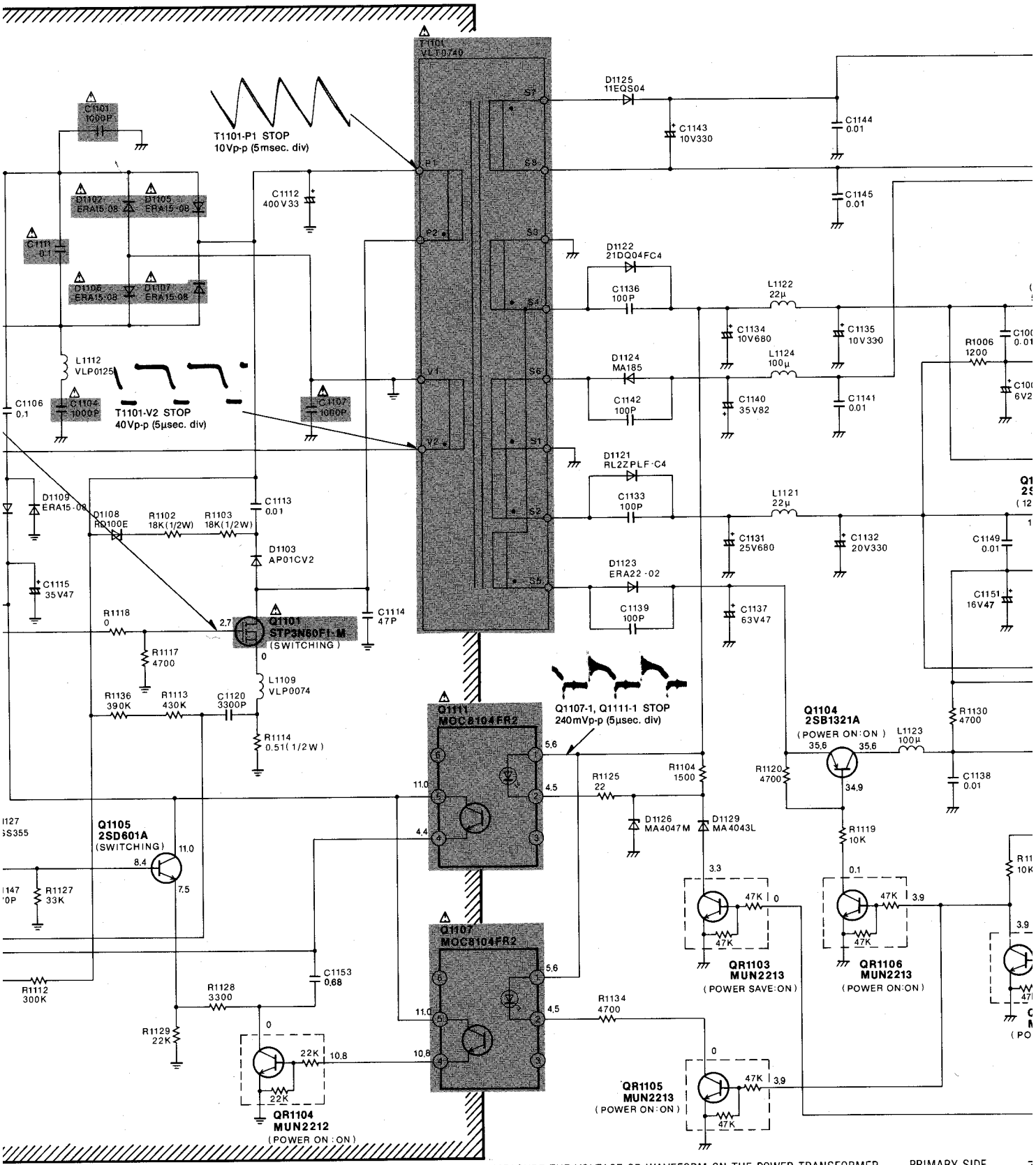


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS

IATIC DIAGRAM

CAUTION THE RED MARK INDICATES THE PR
THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE A
THE PRODUCTS.



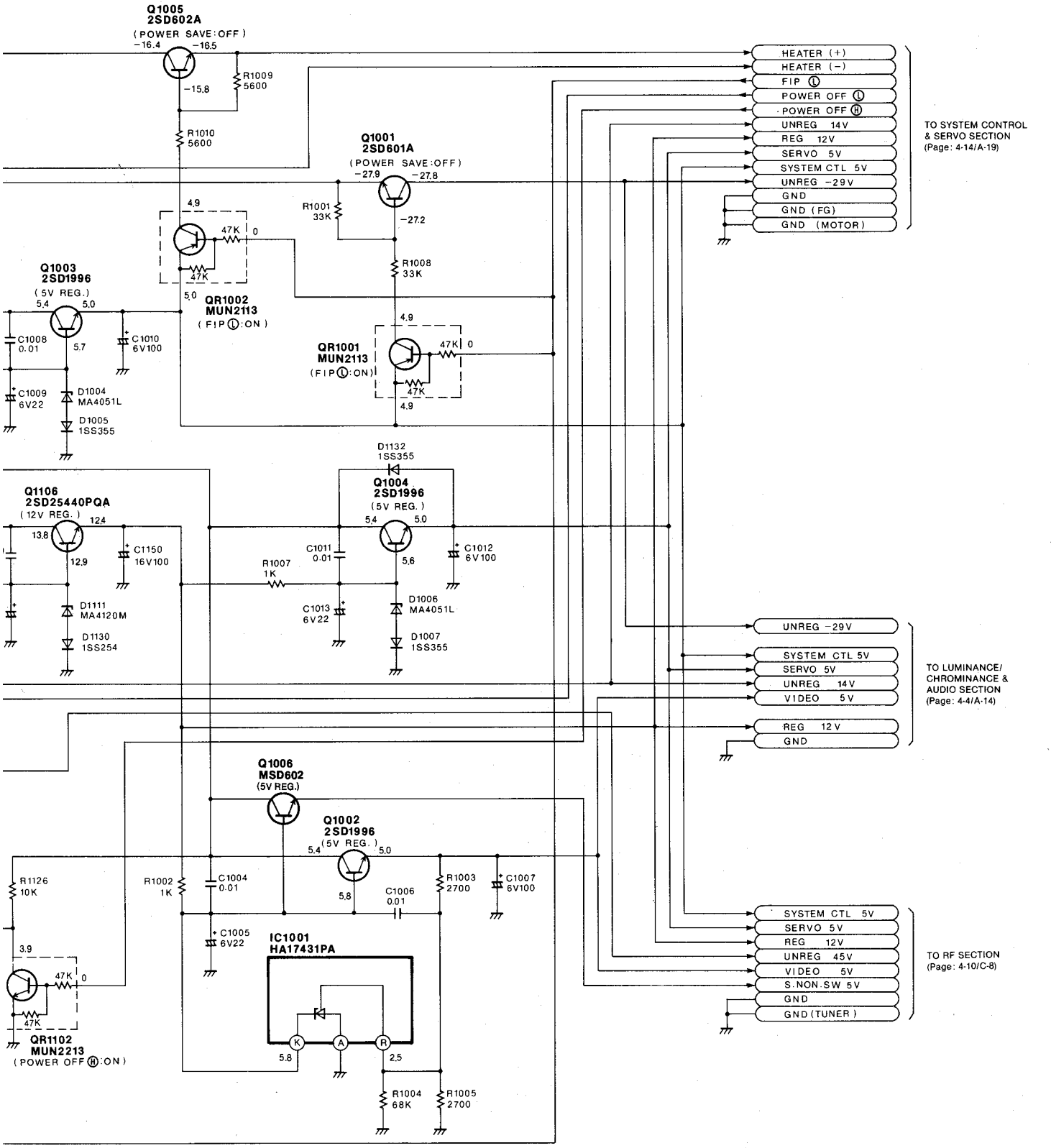
ENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.

PRIMARY SIDE .....
SECONDARY SIDE ...

E PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM

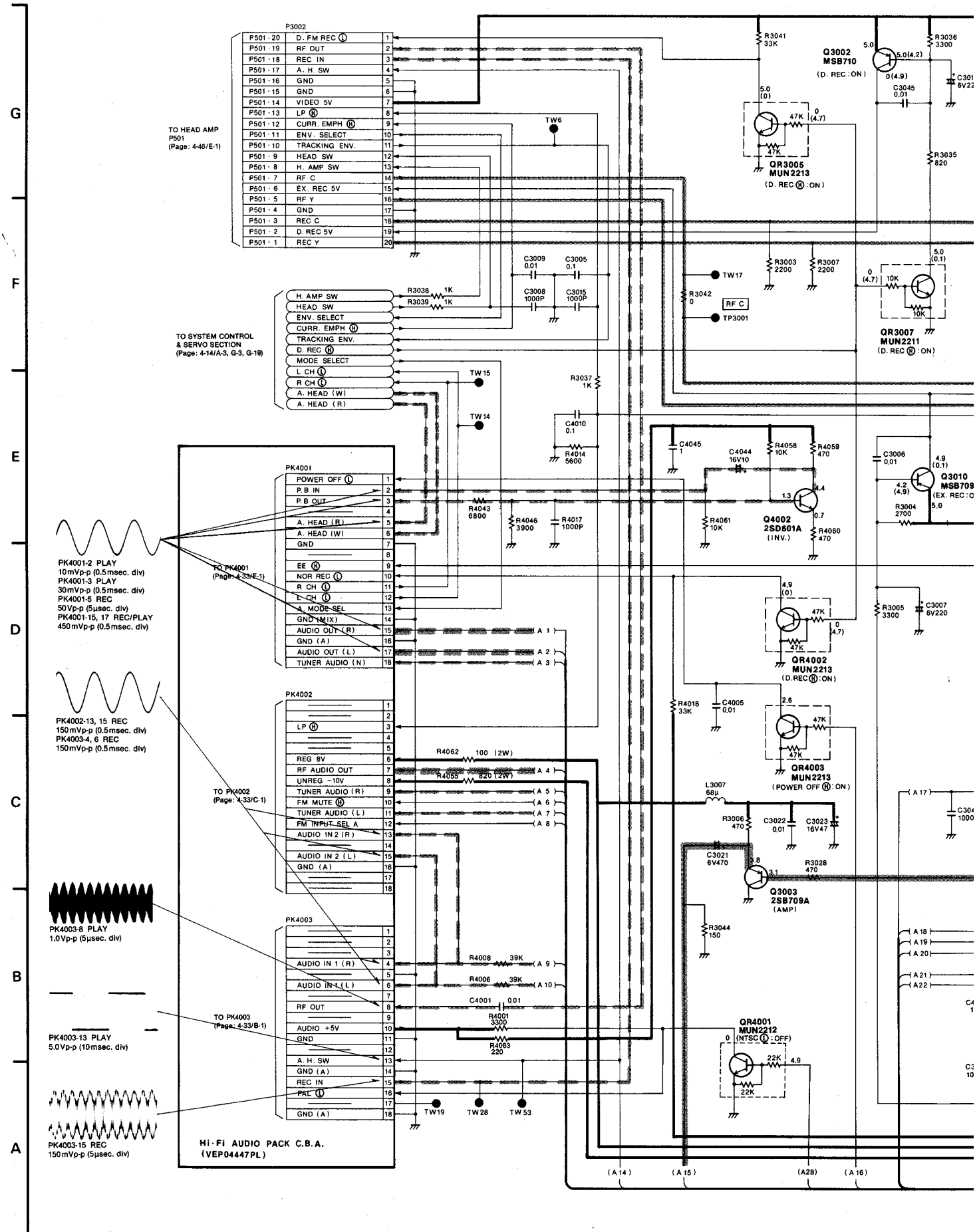
VE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF



NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

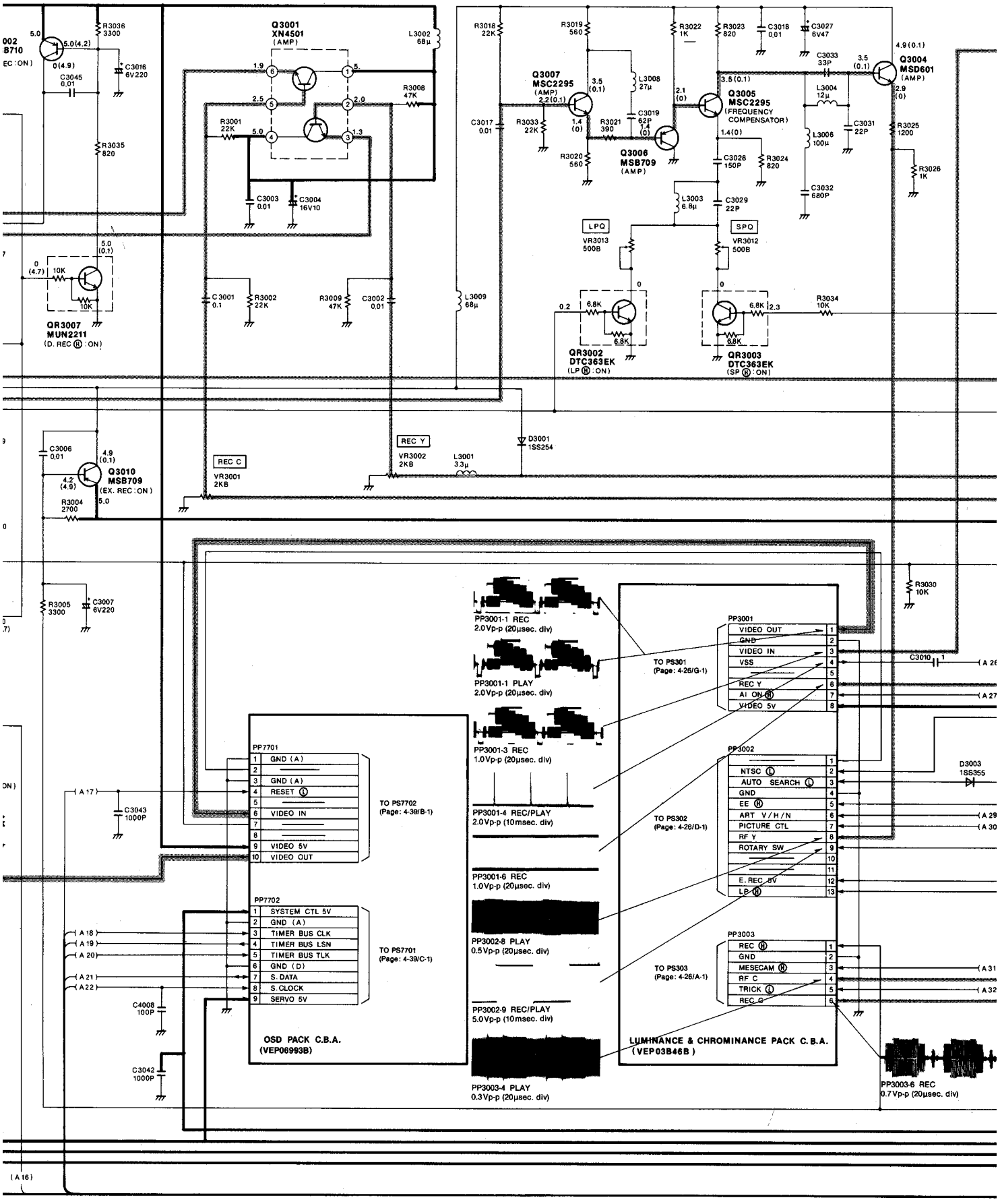
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-2. LUMINANCE/CHROMINANCE & AUDIO SECTION IN MAIN SCHEMAT



SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC M
VIDEO MAIN SIGNAL PATH IN PLAY



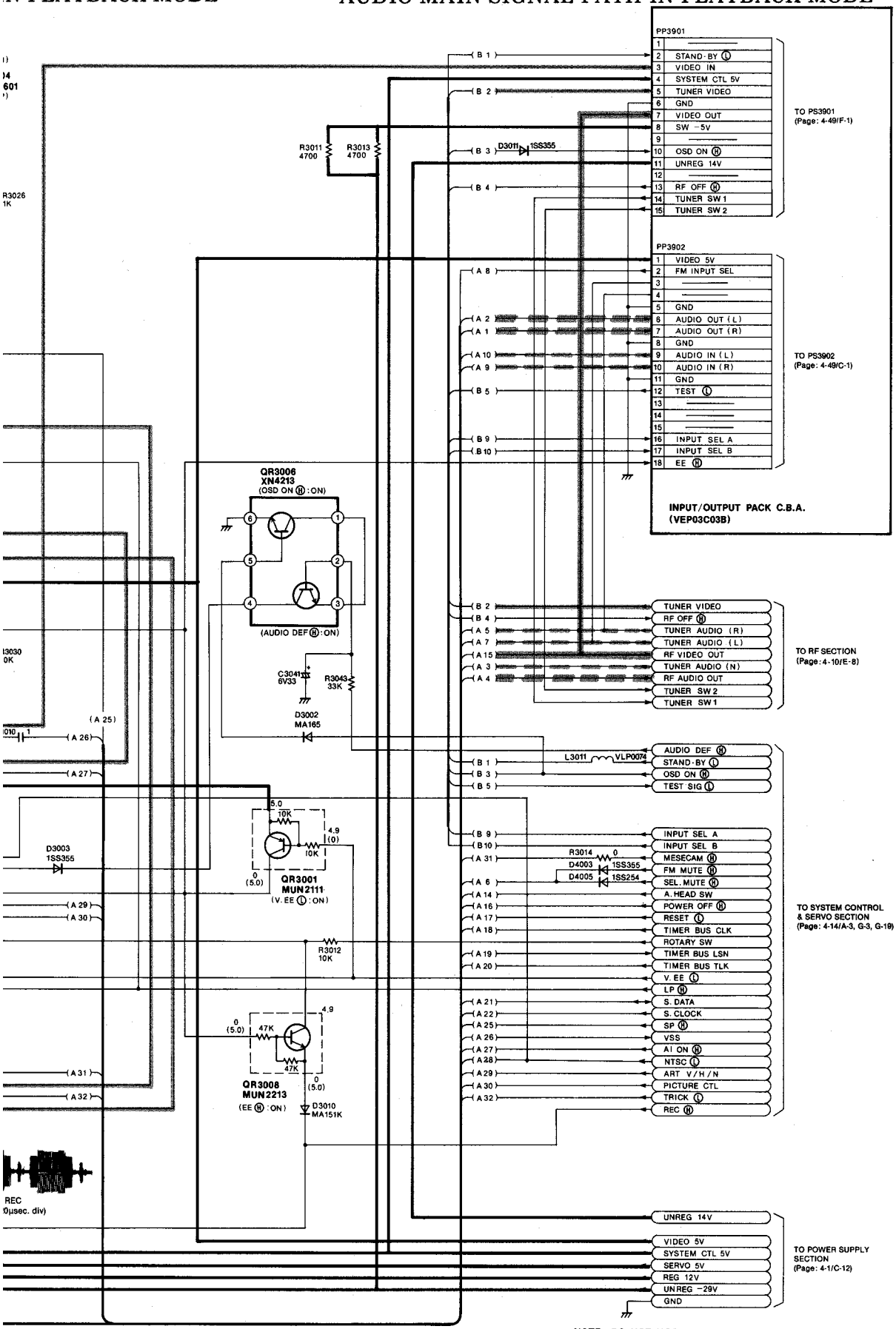
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE WITH PAL COLOUR SIGNAL

6 7 8 9 10

N REC MODE
N PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

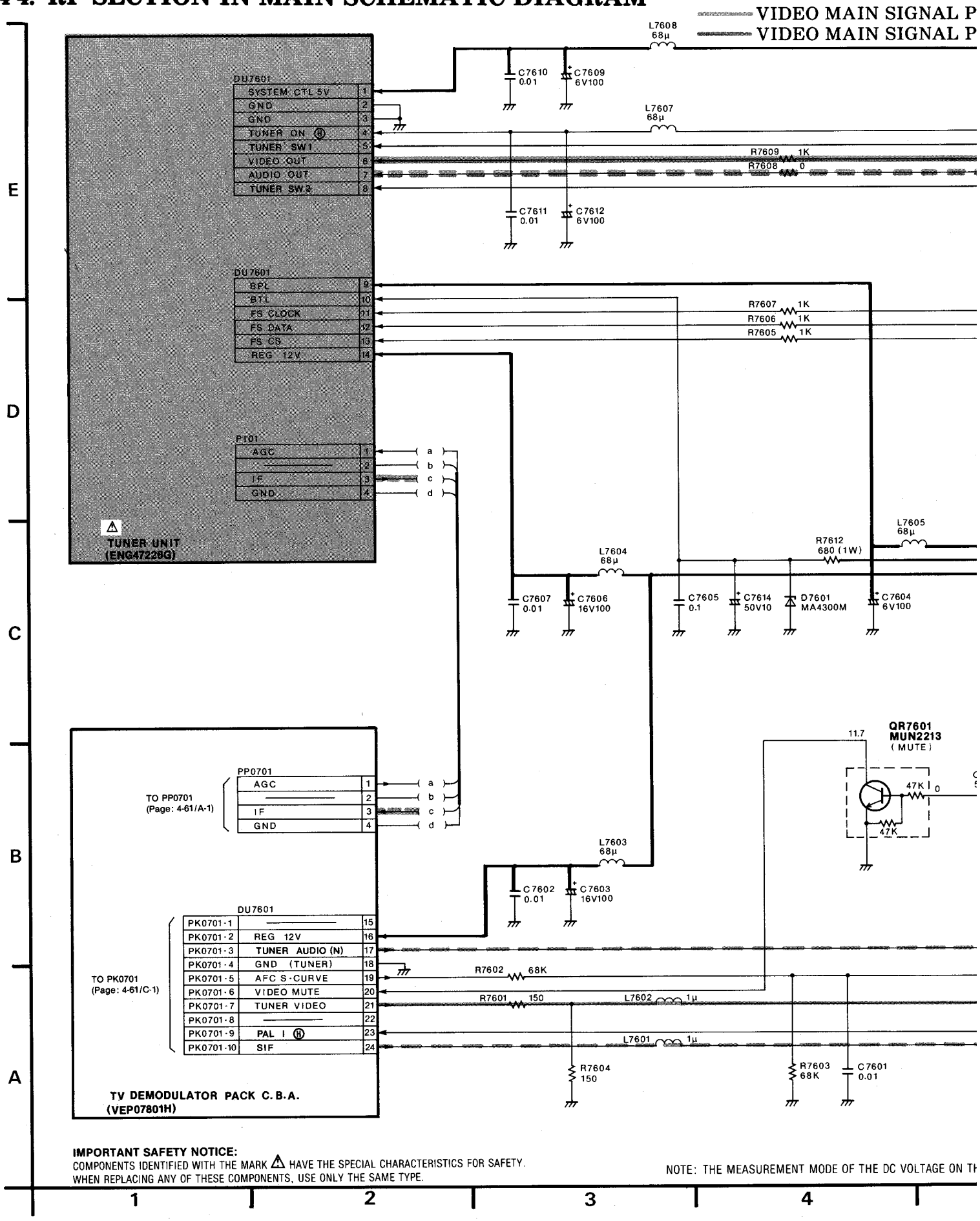


UREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

11 12 13 14 15

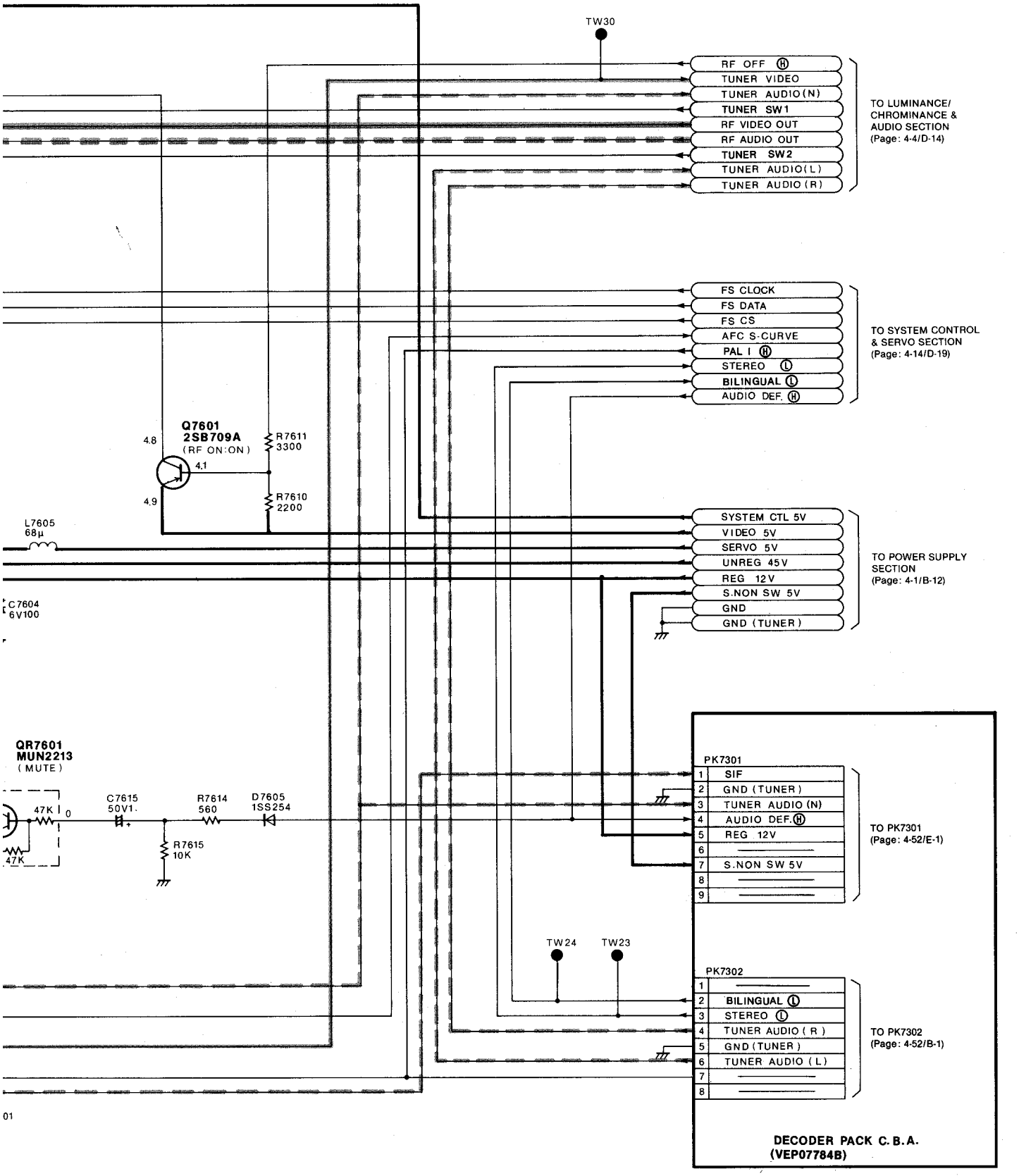
4-4. RF SECTION IN MAIN SCHEMATIC DIAGRAM



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON TH

[SIGNAL PATH IN REC MODE — — — AUDIO MAIN SIGNAL PATH IN REC MODE
[SIGNAL PATH IN PLAYBACK MODE — — — AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

: DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

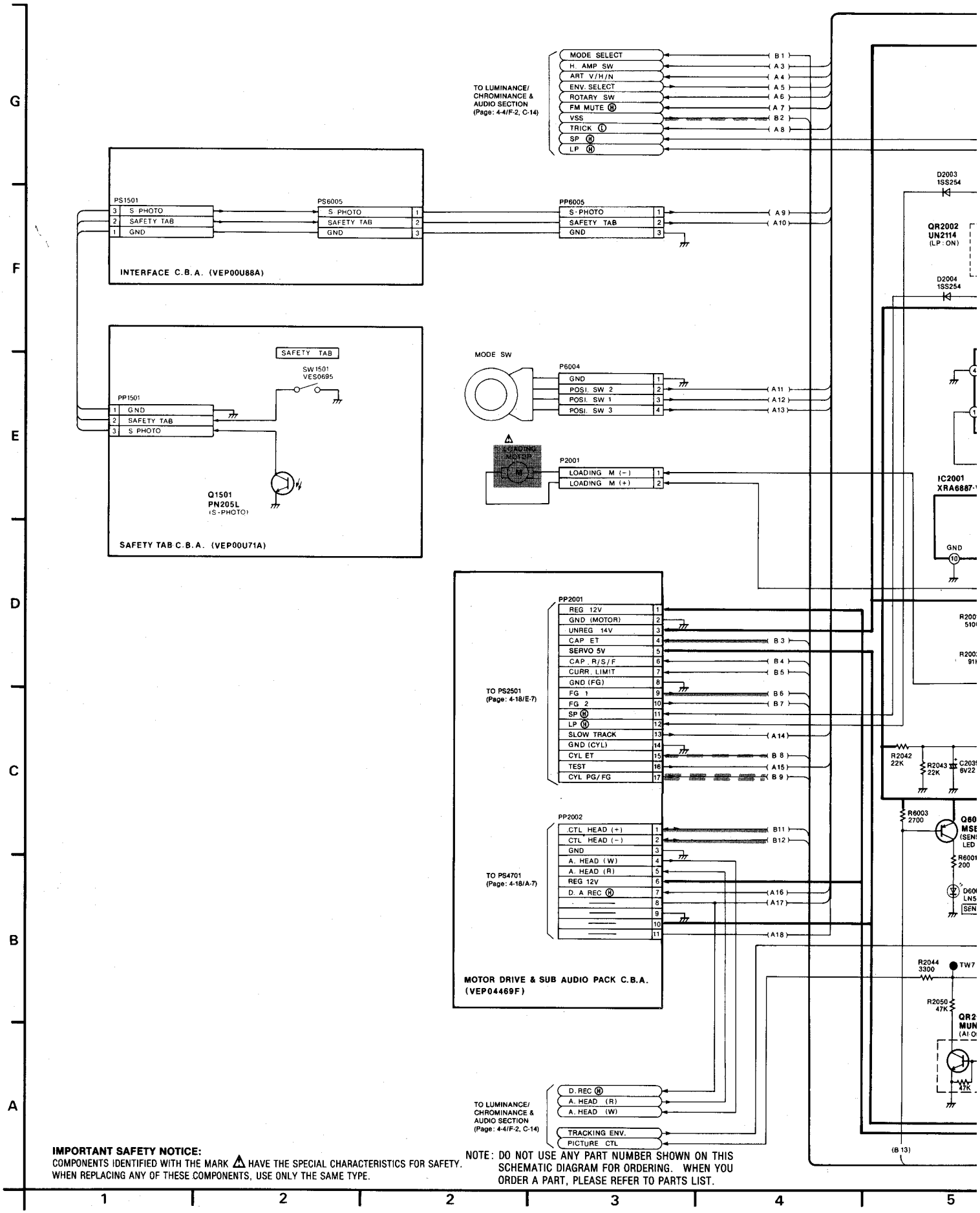
SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2001										IC2004									
MODE	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8		
STOP	0.1	13.8	13.8	0	0	0	7.2	9.0	0.1	0	2.5	2.5	2.5	0	2.7	2.7	3.7	13.2		
PLAY	0.1	13.7	13.7	0	0	0	7.3	8.9	0.2	0	2.5	2.5	2.5	0	2.7	2.7	2.2	13.1		
REC	0.1	13.7	13.7	0	0	0	7.3	8.9	0.1	0	2.5	2.5	2.5	0	2.7	2.7	4.6	13.0		
F.F	0.1	13.6	13.6	0	0	0	13.6	8.9	0.1	0	2.5	2.5	2.5	0	2.7	2.7	3.3	13.0		
REW	0.1	13.6	13.6	0	0	0	13.6	8.9	0.1	0	2.5	2.5	2.5	0	2.7	2.7	4.0	13.0		
REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	4.9	0	0	4.9	4.9	0	0	4.7	5.0	5.0	0	0.1	0	0	2.5	4.9	4.7	0.1	0
PLAY	0	4.7	0	0	4.9	4.9	0	0	4.7	4.9	4.9	0	0.1	0	0	2.5	4.9	4.9	4.9	0
REC	0	4.9	0	0	4.9	4.9	0	0	0	4.9	4.9	0	0.1	0	0	2.5	4.9	4.9	4.9	0
F.F	0	4.9	4.9	0	3.3	4.9	0	0	3.2	4.9	4.9	0	0.1	0	0	2.5	4.9	4.6	2.5	0
REW	0	4.9	4.9	0	2.8	4.9	0	0	2.9	4.9	4.9	0	0.1	0	0	2.5	4.9	4.9	2.6	0
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	4.9	5.0	0.2	2.4	1.4	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.4
PLAY	4.9	4.9	2.5	2.4	3.2	2.5	2.5	2.5	0	2.5	2.6	2.5	4.9	0	0	0	2.5	2.5	0	2.7
REC	4.9	4.9	2.5	2.4	0.8	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	3.3	3.5	0	2.5	2.5	0	2.4
F.F	4.9	4.9	1.9	2.4	1.4	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.8
REW	4.9	4.9	2.0	2.4	2.7	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.4
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.4	5.0	1.3	3.5	0	4.7	0	0	4.9	0	4.7	4.9	4.9	4.9	4.9	4.9	0	0	0	4.9
PLAY	2.5	4.9	1.2	3.2	3.7	4.7	0	0	4.9	0	4.7	4.9	4.9	0.1	4.9	4.9	0	0	0	4.9
REC	2.5	4.9	1.4	3.6	0	4.9	0	0	4.9	0	4.7	4.9	4.9	0.1	4.9	4.9	0	0	0	4.9
F.F	2.4	4.9	1.4	3.5	0	4.9	0	0	4.9	0	4.7	4.9	4.9	0.1	0	4.9	0	0	0	4.9
REW	2.4	4.9	1.4	3.5	0	4.9	0	0	4.9	0	4.7	4.9	4.9	0.1	0	4.9	0	0	0	4.9
REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	4.9	2.0	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	4.9	4.9	0	0	4.7	0	0	4.9	0
PLAY	4.9	0	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	0	0	0	0	4.7	0	4.9	4.9	0
REC	4.9	0	3.2	4.2	4.9	4.8	4.9	4.9	4.9	4.9	0	0	4.9	0	0	4.7	0	0	4.9	0
F.F	4.9	0	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	0	4.9	0	0	0	0	0	4.9	0
REW	4.9	4.9	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	4.9	4.9	0	0	0	0	0	4.9	0
REF. NO.	IC6001																			
MODE	81	82	83	84																
STOP	0	2.3	–	4.9																
PLAY	0	2.3	–	4.9																
REC	0	2.3	–	4.9																
F.F	0	2.3	–	4.9																
REW	0	2.3		4.9																
REF. NO.	IC6002										IC6003									
MODE	1	2	3	4							1	2	3	4						
STOP	1.2	0	4.9	0							2.3	1.2	0.1	0						
PLAY	1.2	0	4.9	0							2.3	1.2	4.9	0						
REC	1.2	0	4.9	0							2.3	1.2	4.9	0						
F.F	1.2	0	4.0	0							2.3	1.2	2.6	0						
REW	1.2	0	4.9	0							2.3	1.2	2.6	0						

SYSTEM CONRTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q1501			Q6001			Q6002											
MODE	E	C		E	C	B	E	C										
STOP	0	4.7		5.0	−0.4	5.0	0	4.9										
PLAY	0	4.9		4.9	4.9	4.2	0	4.9										
REC	0	4.9		4.9	4.9	4.2	0	4.9										
F.F	0	4.6		4.9	4.9	4.2	0	4.9										
REW	0	4.9		4.9	4.9	4.2	0	4.9										
REF. NO.	QR2001			QR2002			QR2003						QR2004					
MODE	E	C	B	E	C	B	1	2	3	4	5		E	C	B			
STOP	4.9	0	4.9	5.0	0.2	4.9	0	0	3.6	0	3.6		4.9	4.7	4.9			
PLAY	4.9	0	4.9	4.9	0.2	4.9	0	0	3.6	0	3.6		4.9	4.6	4.9			
REC	4.9	0	4.8	4.9	0.2	4.9	0	0	3.6	0	3.6		4.9	4.5	4.8			
F.F	4.9	0	4.9	4.9	0.2	4.9	0	0.8	0	0	0		4.9	0	4.9			
REW	4.9	0	4.9	4.9	0.2	4.9	0	0.8	0	0	0		4.9	4.6	4.9			
REF. NO.	QR2006						QR2007						QR2008			QR2009		
MODE	1	2	3	4	5	6	1	2	3	4	5	6	E	C	B	E	C	B
STOP	4.9	4.7	0	5.1	4.9	5.0	0	4.7	0	0	4.7	0	0	0	4.2	0	0	4.2
PLAY	4.9	4.7	4.9	5.1	4.9	5.0	0	4.7	0	0	4.7	0	0	0	4.2	0	0	4.2
REC	4.9	4.7	4.9	5.1	4.9	5.0	0	4.7	0	0	4.7	0	0	0	4.2	0	0	4.2
F.F	4.9	4.7	4.9	5.1	4.9	5.0	0	4.7	0	0	4.7	0	0	0	4.2	0	0	4.2
REW	4.9	4.9	4.9	5.1	4.9	5.0	0	4.7	0	0	4.7	0	0	0	4.2	0	0	4.2
REF. NO.	QR2014			QR6001						QR6003								
MODE	E	C	B	1	2	3	4	5		E	C	B						
STOP	0	2.7	0	0	0	4.9	0	4.7		0	12.9	0						
PLAY	0	2.7	0	0	0	4.9	0	4.7		0	12.9	0						
REC	0	2.7	0	0	0	4.9	0	4.7		0	12.9	0						
F.F	0	2.7	0	13.6	7.3	0	0	0		0	12.9	0						
REW	0	2.7	0	13.6	7.4	0	0	0		0	12.9	0						

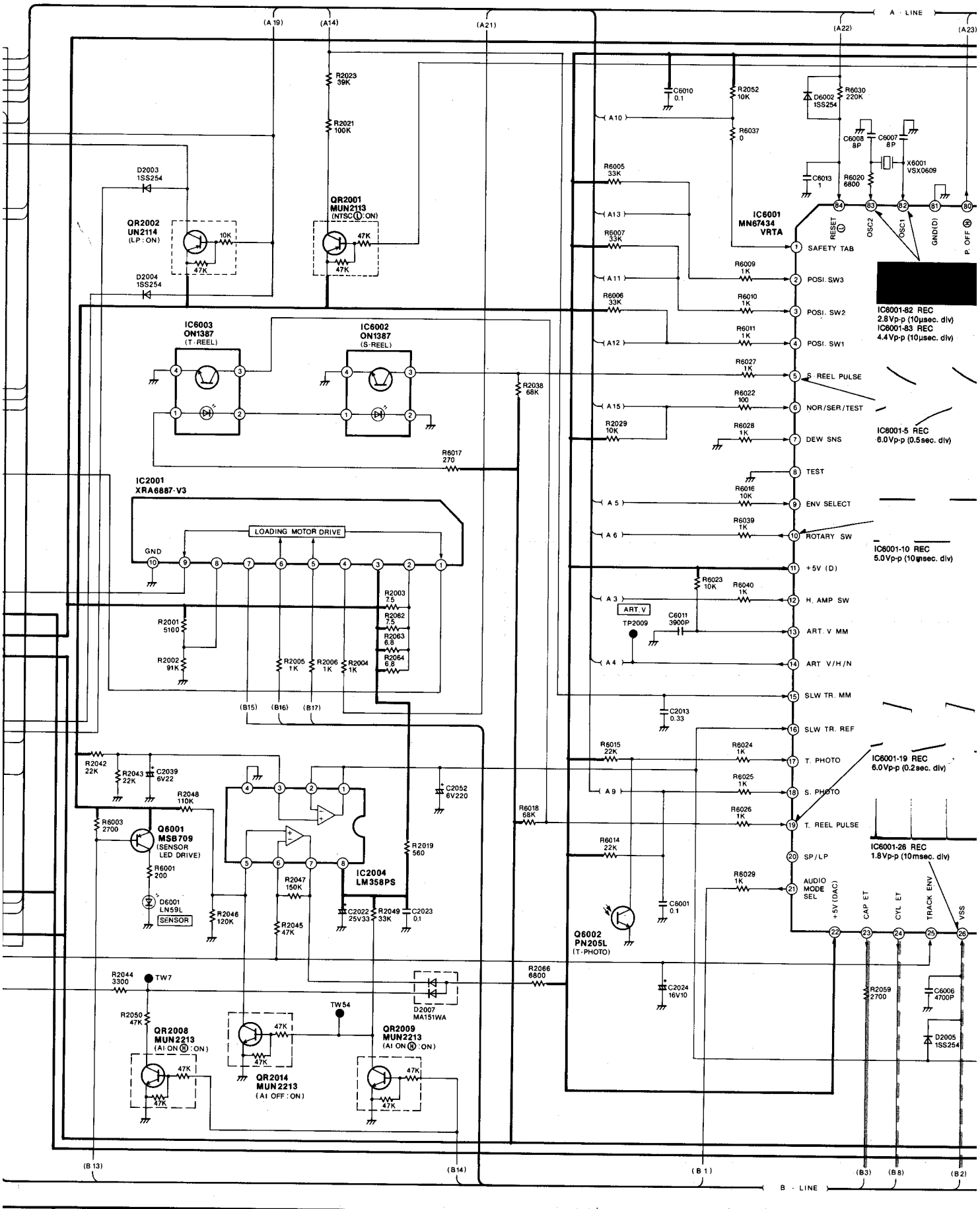
4-5. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

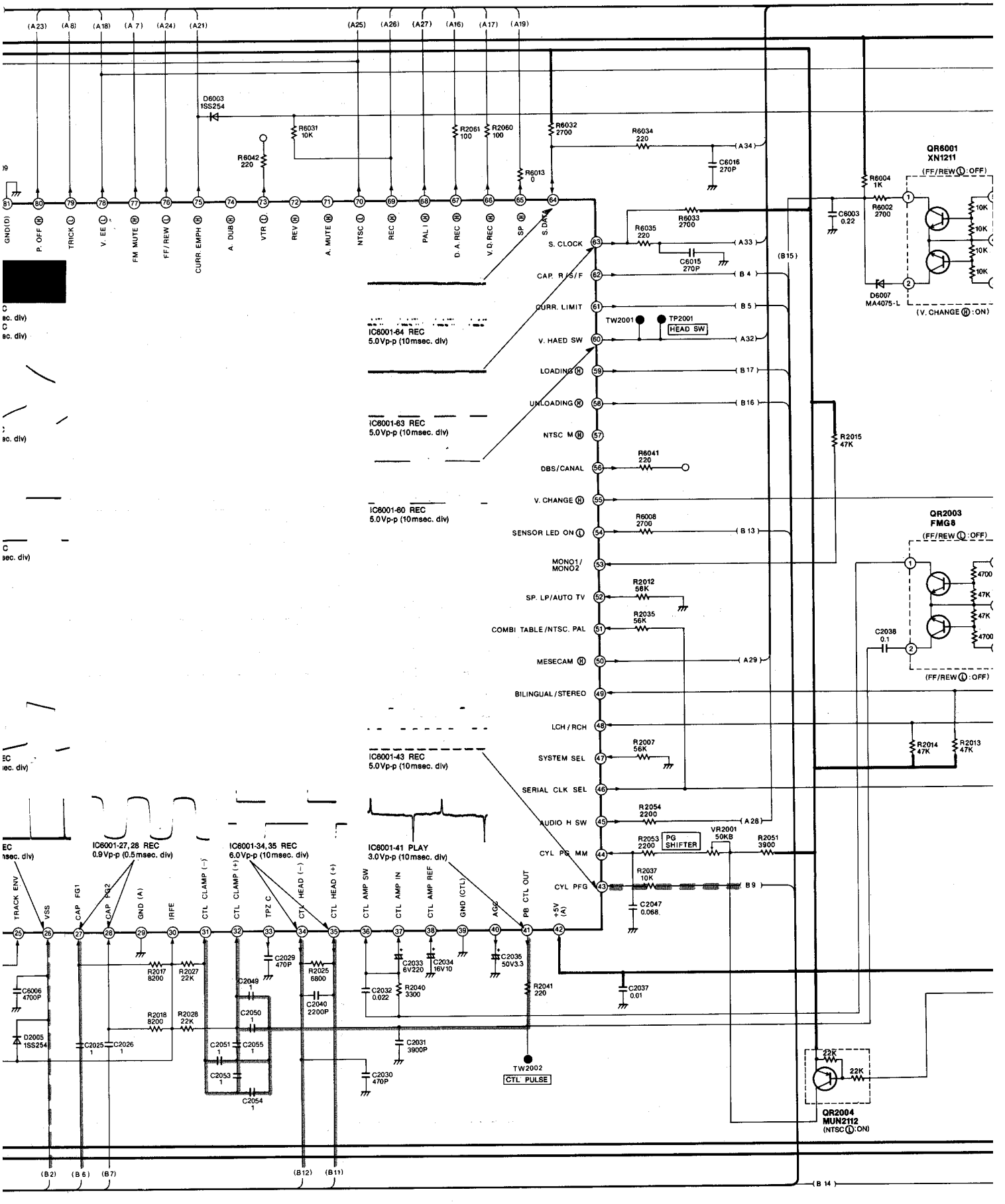
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

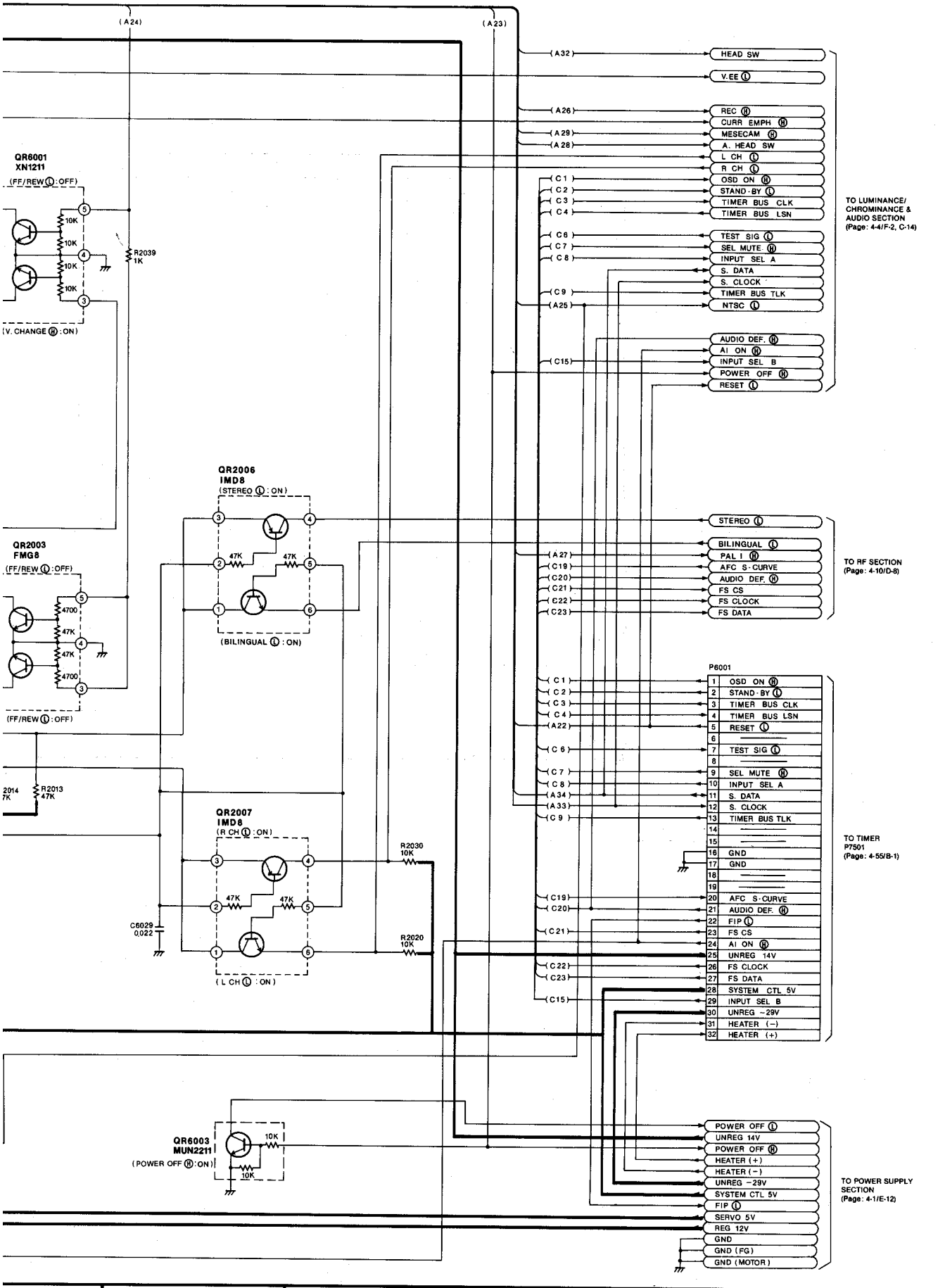
TIC DIAGRAM


A · LINE
B · LINE
IC6001
MN67434
VRTA
SAFETY TAB
POSI. SW3
POSI. SW2
POSI. SW1
S·REEL PULSE
NOR/SER/TEST
DEW SNS
TEST
ENV SELECT
ROTARY SW
+5V (D)
H. AMP SW
ART. V MM
ART V/H/N
SLW TR. MM
SLW TR. REF
T. PHOTO
S. PHOTO
T. REEL PULSE
SP/LP
AUDIO MODE SEL
+5V (DAC)
CAP ET
CYL ET
TRACK ENV
VSS
RESET
OSC2
OSC1
GND(D)
P. OFF
X6001 VSX0609
IC6001-82 REC 2.8Vp-p (10μsec. div)
IC6001-83 REC 4.4Vp-p (10μsec. div)
IC6001-5 REC 6.0Vp-p (0.5sec. div)
IC6001-10 REC 5.0Vp-p (10msec. div)
IC6001-19 REC 6.0Vp-p (0.2sec. div)
IC6001-26 REC 1.8Vp-p (10msec. div)
IC6003 ON1387 (T·REEL)
IC6002 ON1387 (S·REEL)
IC2001 XRA6887-V3
LOADING MOTOR DRIVE
IC2004 LM358PS
Q6001 MSB709 (SENSOR LED DRIVE)
Q6002 PN205L (T·PHOTO)
QR2001 MUN2113 (NTSC①:ON)
QR2002 UN2114 (LP:ON)
QR2008 MUN2213 (AI·ON Ⓝ:ON)
QR2009 MUN2213 (AI·ON Ⓝ:ON)
QR2014 MUN2213 (AI·OFF:ON)
D2003 1SS254
D2004 1SS254
D6002 1SS254
D6001 LN59L SENSOR
D2007 MA151WA
D2005 1SS254
ART.V
TP2009
TW7
TW54

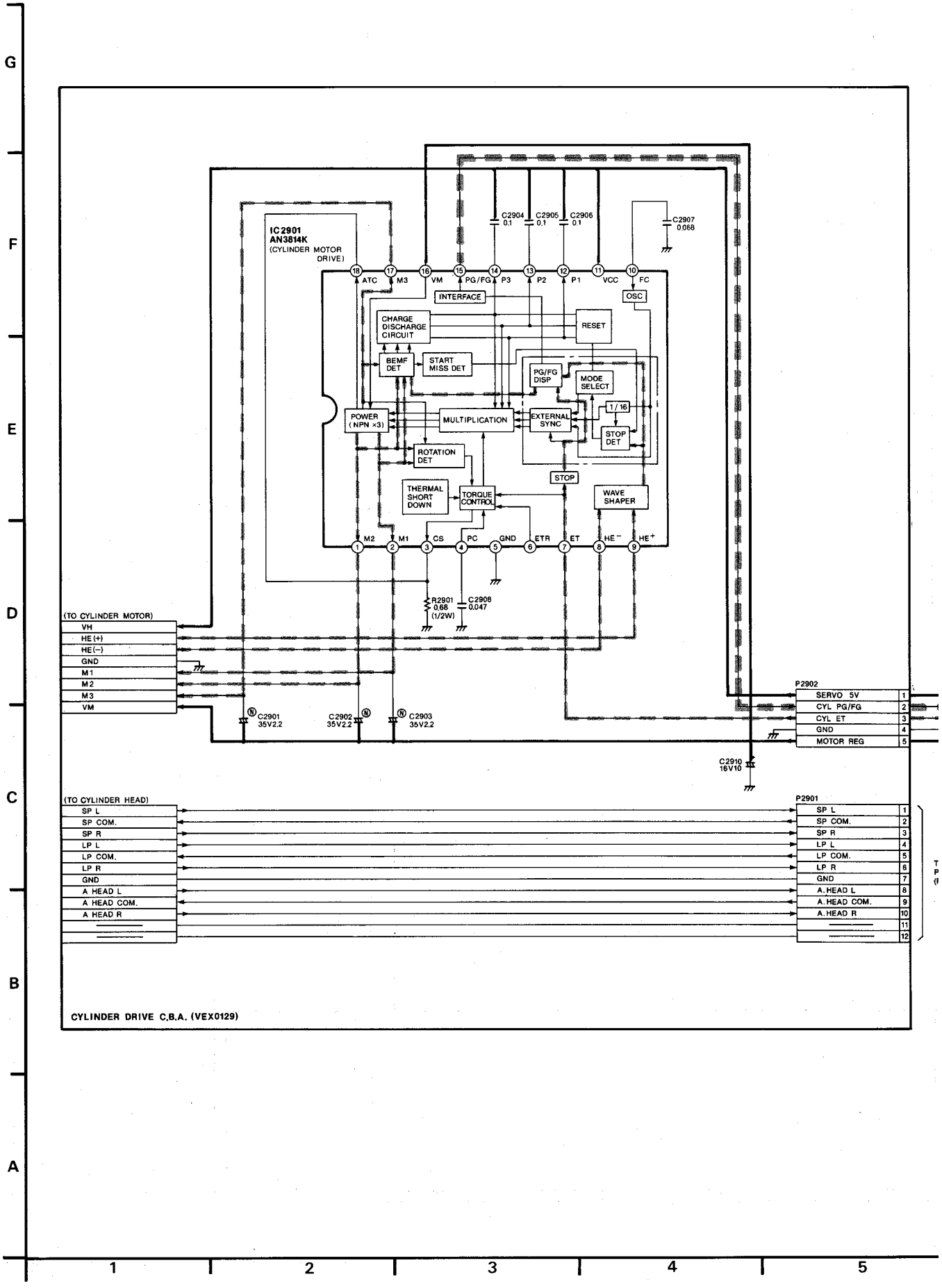
CAPSTAN SERVO SPEED LOOP

CAPSTAN SERVO PHASE LOOP



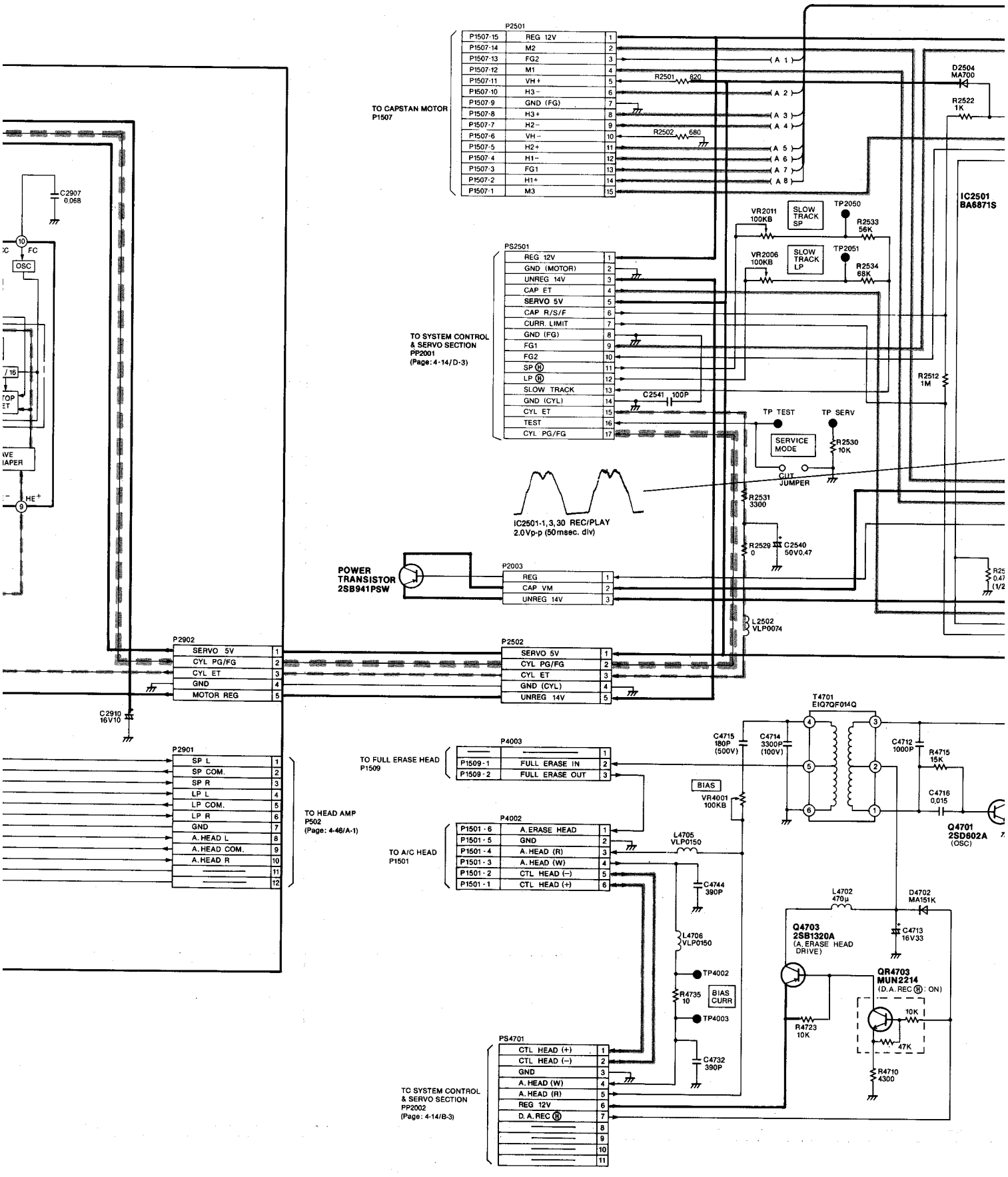

CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
(A24)
(A23)
QR6001
XN1211
(FF/REW Ⓛ:OFF)
10K
10K
10K
10K
R2039
1K
(V. CHANGE Ⓗ:ON)
QR2003
FMG8
(FF/REW Ⓛ:OFF)
4700
47K
47K
4700
(FF/REW Ⓛ:OFF)
QR2006
IMD8
(STEREO Ⓛ:ON)
47K
47K
(BILINGUAL Ⓛ:ON)
2014
7K
R2013
47K
QR2007
IMD8
(R CH Ⓛ:ON)
47K
47K
C6029
0.022
R2030
10K
R2020
10K
(L CH Ⓛ:ON)
QR6003
MUN2211
(POWER OFF Ⓗ:ON)
10K
10K
(A32) HEAD SW
V.EE Ⓛ
(A26) REC Ⓗ
CURR EMPH Ⓗ
(A29) MESECAM Ⓗ
(A28) A. HEAD SW
L CH Ⓛ
R CH Ⓛ
(C1) OSD ON Ⓗ
(C2) STAND-BY Ⓛ
(C3) TIMER BUS CLK
(C4) TIMER BUS LSN
(C6) TEST SIG Ⓛ
(C7) SEL MUTE Ⓗ
(C8) INPUT SEL A
S. DATA
S. CLOCK
(C9) TIMER BUS TLK
(A25) NTSC Ⓛ
AUDIO DEF. Ⓗ
AI ON Ⓗ
(C15) INPUT SEL B
POWER OFF Ⓗ
RESET Ⓛ
TO LUMINANCE/ CHROMINANCE & AUDIO SECTION (Page: 4-4/F-2, C-14)
STEREO Ⓛ
BILINGUAL Ⓛ
(A27) PAL I Ⓗ
(C19) AFC S-CURVE
(C20) AUDIO DEF. Ⓗ
(C21) FS CS
(C22) FS CLOCK
(C23) FS DATA
TO RF SECTION (Page: 4-10/D-8)
P6001
1 OSD ON Ⓗ
2 STAND-BY Ⓛ
3 TIMER BUS CLK
4 TIMER BUS LSN
(A22) 5 RESET Ⓛ
6
(C6) 7 TEST SIG Ⓛ
8
(C7) 9 SEL MUTE Ⓗ
(C8) 10 INPUT SEL A
(A34) 11 S. DATA
(A33) 12 S. CLOCK
(C9) 13 TIMER BUS TLK
14
15
16 GND
17 GND
18
19
(C19) 20 AFC S-CURVE
(C20) 21 AUDIO DEF. Ⓗ
22 FIP Ⓛ
(C21) 23 FS CS
24 AI ON Ⓗ
25 UNREG 14V
(C22) 26 FS CLOCK
(C23) 27 FS DATA
28 SYSTEM CTL 5V
(C15) 29 INPUT SEL B
30 UNREG -29V
31 HEATER (-)
32 HEATER (+)
TO TIMER P7501 (Page: 4-55/B-1)
POWER OFF Ⓛ
UNREG 14V
POWER OFF Ⓗ
HEATER (+)
HEATER (-)
UNREG -29V
SYSTEM CTL 5V
FIP Ⓛ
SERVO 5V
REG 12V
GND
GND (FG)
GND (MOTOR)
TO POWER SUPPLY SECTION (Page: 4-1/E-12)
15
16
17
18
19
20

4-6. MOTOR DRIVE & SUB AUDIO PACK SCHEMATIC DIAGRAM



HEMATIC DIAGRAM

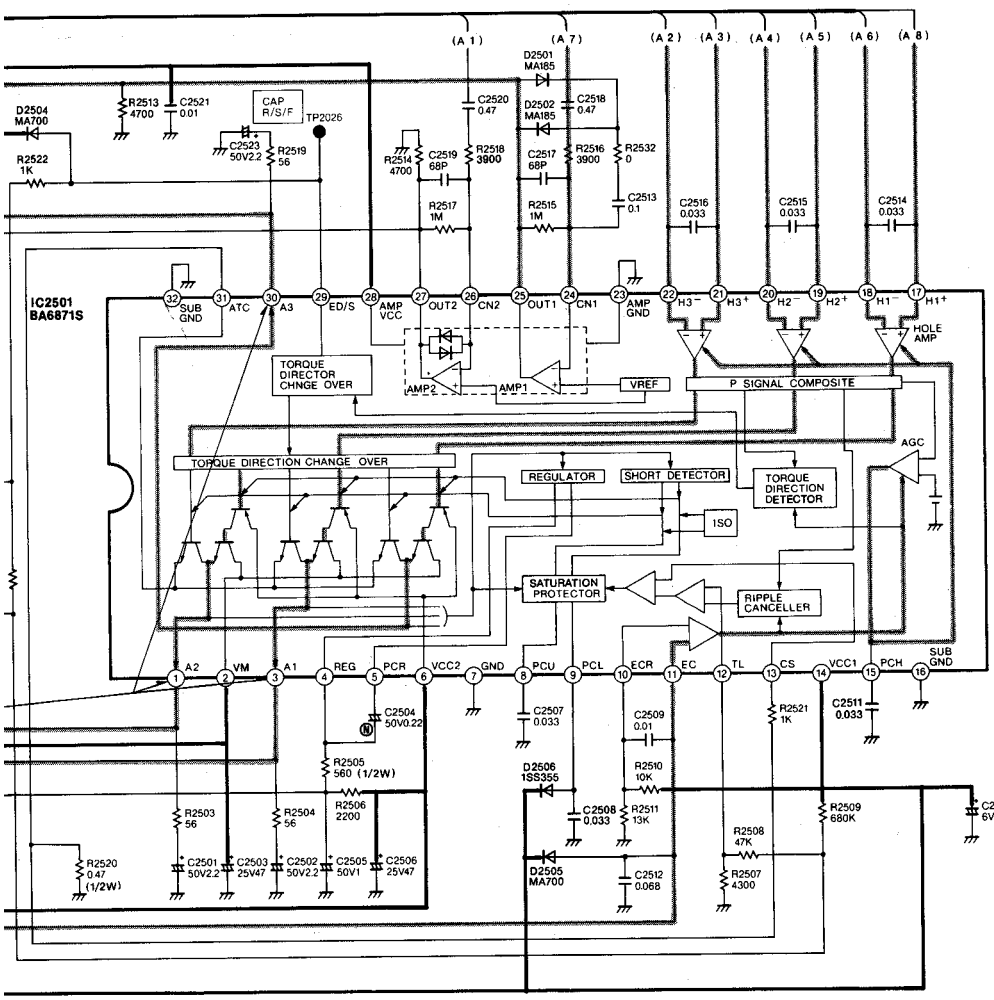
CAPSTAN SERVO SPEEI
CYLINDER SERVO SPEE

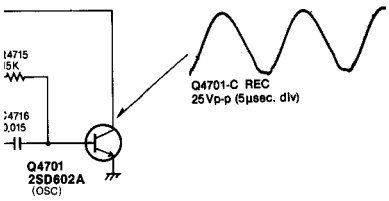


4 5 6 7 8 9

SPEED LOOP ——— CAPSTAN SERVO PHASE LOOP

SPEED LOOP - - - - CYLINDER SERVO PHASE LOOP





NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

MOTOR DRIVE & SUB AUDIO PACK ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.6	4.4	0.6	13.2	0.1	13.9	0	4.5	0.7	2.8	0.2	0.4	0	4.9	1.5	0	2.3	2.3	2.3	2.2
PLAY	2.6	4.3	2.6	12.4	1.9	13.6	0	0.7	0.7	2.8	2.5	0.4	0.1	4.9	1.5	0	2.3	2.3	2.3	2.3
REC	2.7	4.3	2.7	12.4	2.0	13.6	0	0.7	0.7	2.8	2.5	0.4	0.1	5.0	1.5	0	2.3	2.3	2.3	2.3
F.F	7.5	13.4	7.5	4.3	11.6	13.5	0.1	0.8	0.8	2.8	2.0	0.5	0.2	4.9	1.5	0	2.3	2.3	2.3	2.3
REW	7.0	13.5	7.0	6.9	11.7	13.6	0	0.7	0.8	2.8	2.3	0.5	0.1	4.9	1.5	0	2.3	2.3	2.3	2.3
REF. NO.	IC2501																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	2.2	2.3	0	6.3	6.3	6.3	6.3	12.3	2.0	0.6	0	0								
PLAY	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	2.6	0	0								
REC	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	2.6	0.1	0								
F.F	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	7.5	0.2	0								
REW	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	4.9	7.4	0.2	0								
REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	13.1	13.1	0.1	0.6	0	2.5	2.4	2.6	2.5	2.6	4.9	3.7	3.6	3.7	1.3	13.8	13.3	0.1		
PLAY	13.8	12.8	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.7	3.7	3.7	1.4	13.6	13.7	0.2		
REC	13.7	13.7	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.8	3.7	3.7	1.5	13.6	13.7	0.2		
F.F	13.8	13.8	0.1	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.8	3.7	3.7	1.5	13.5	13.7	0.1		
REW	13.8	13.8	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.7	3.7	3.7	1.5	13.5	13.7	0.2		

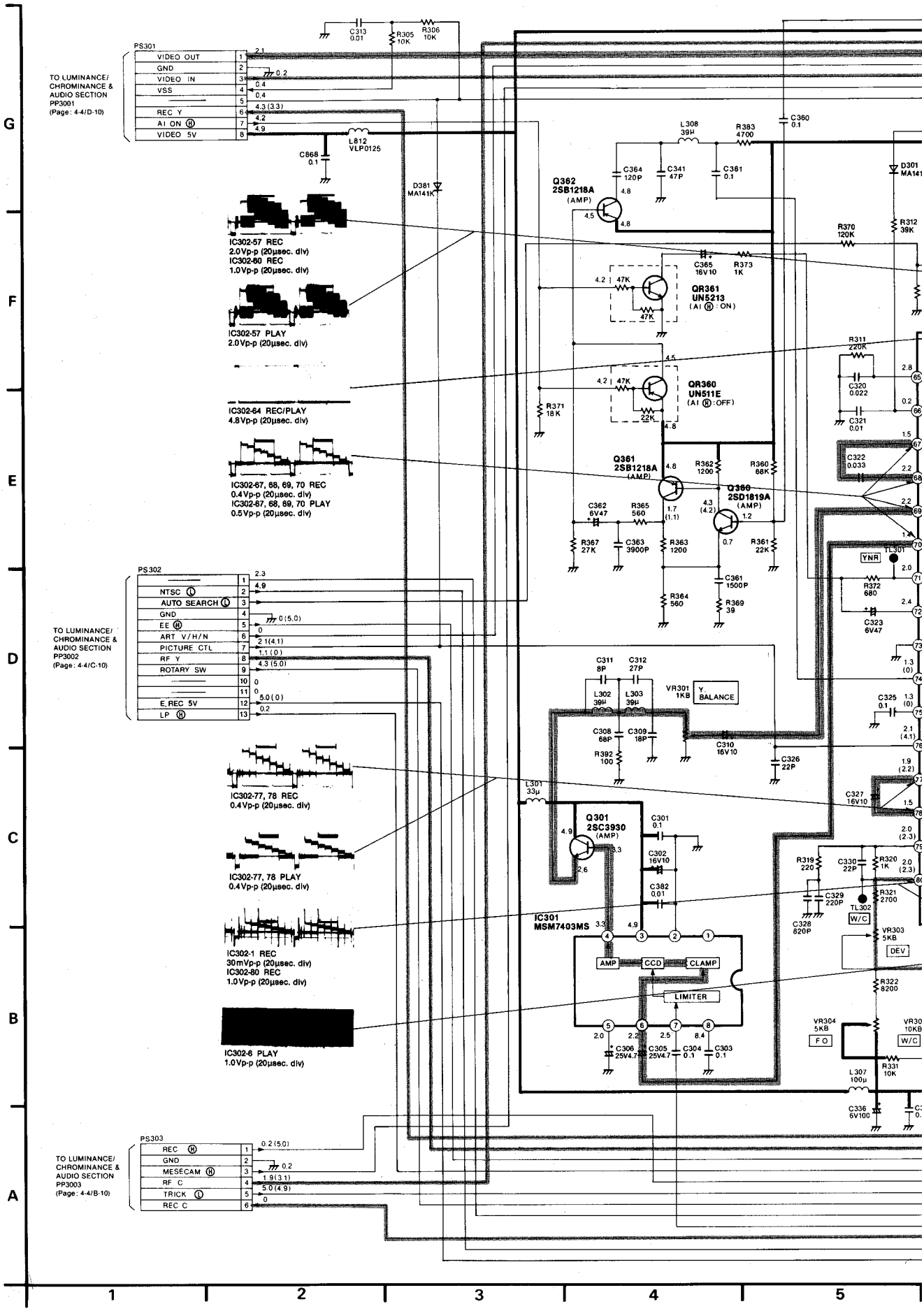
MOTOR DRIVE & SUB AUDIO PACK PINs DC VOLTAGE CHART (SP MODE)

REF. NO.	PS2501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
STOP	12.3	0	13.8	0.2	4.9	2.0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	5.0	1.4			
PLAY	12.3	0	13.6	2.5	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4			
REC	12.3	0	13.6	2.5	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4			
F.F	12.3	0	13.5	2.1	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4			
REW	12.3	0	13.5	2.1	4.9	4.9	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4			
REF. NO.	PS4701																			
MODE	1	2	3	4	5	6	7	8	9	10	11									
STOP	0	0	0	0	0	12.3	0	0	0	4.9	0									
PLAY	0	0	0	0	0	12.3	0	0	0	0	4.9									
REC	3.5	3.5	0	0	0	12.3	4.9	4.7	0	4.9	0									
F.F	0	0	0	0	0	12.3	0	0	0	4.9	0									
REW	0	0	0	0	0	12.3	0	0	0	4.9	0									

MOTOR DRIVE & SUB AUDIO PACK TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q4701			Q4703														
MODE	E	C	B	E	C	B												
STOP	0	0.2	0.2	12.3	0.3	12.3												
PLAY	0	0.3	0.3	12.3	0.3	12.3												
REC	0	11.3	−1.4	12.3	11.9	11.9												
F.F	0	0.3	0.3	12.3	0.3	12.3												
REW	0	0.3	0.3	12.3	0.3	12.3												
REF. NO.	QR4703																	
MODE	E	C	B															
STOP	0	12.3	0															
PLAY	0	12.3	0															
REC	4.1	11.5	4.9															
F.F	0	12.3	0															
REW	0	12.3	0															

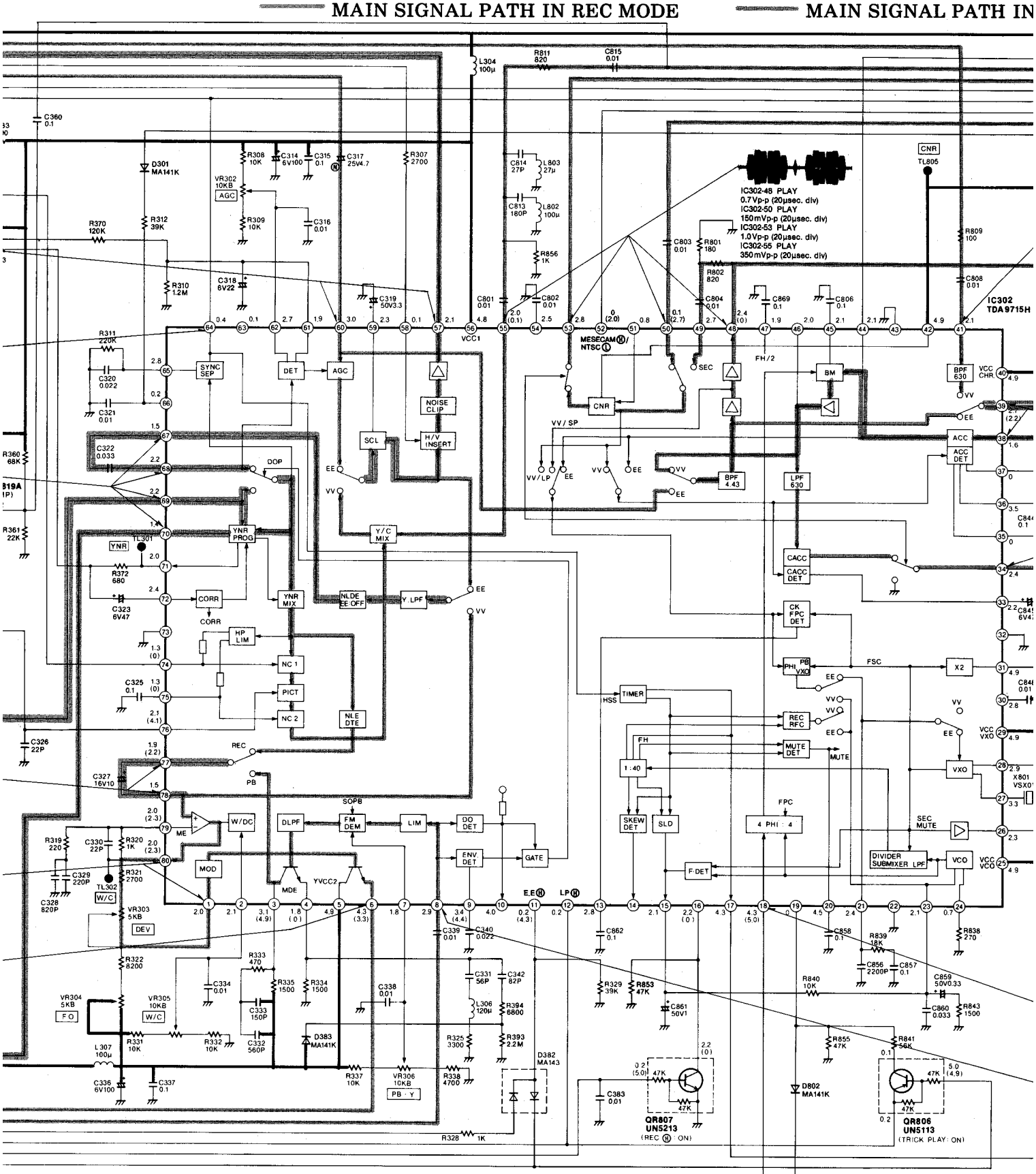
4-8. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM



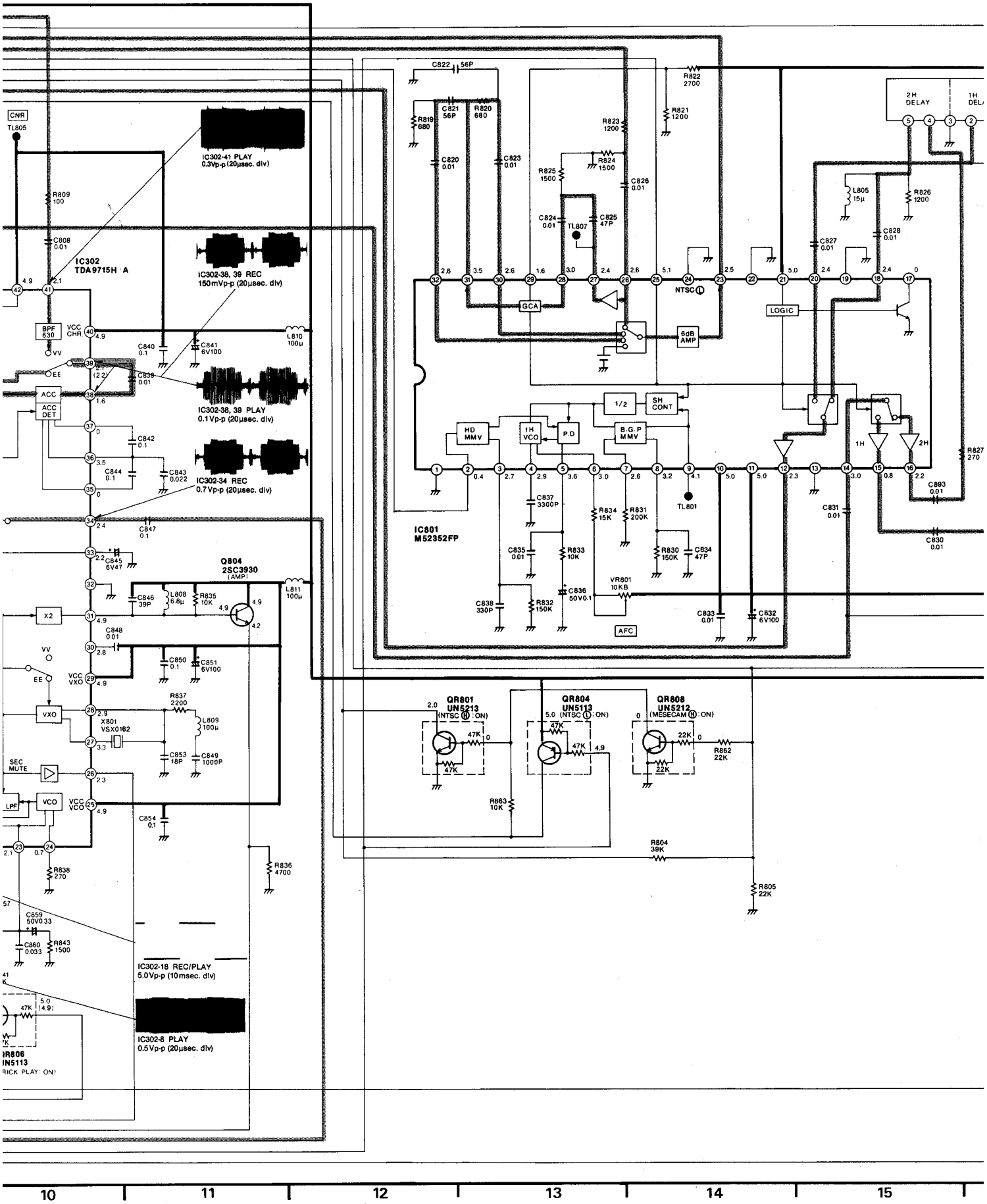
IC DIAGRAM

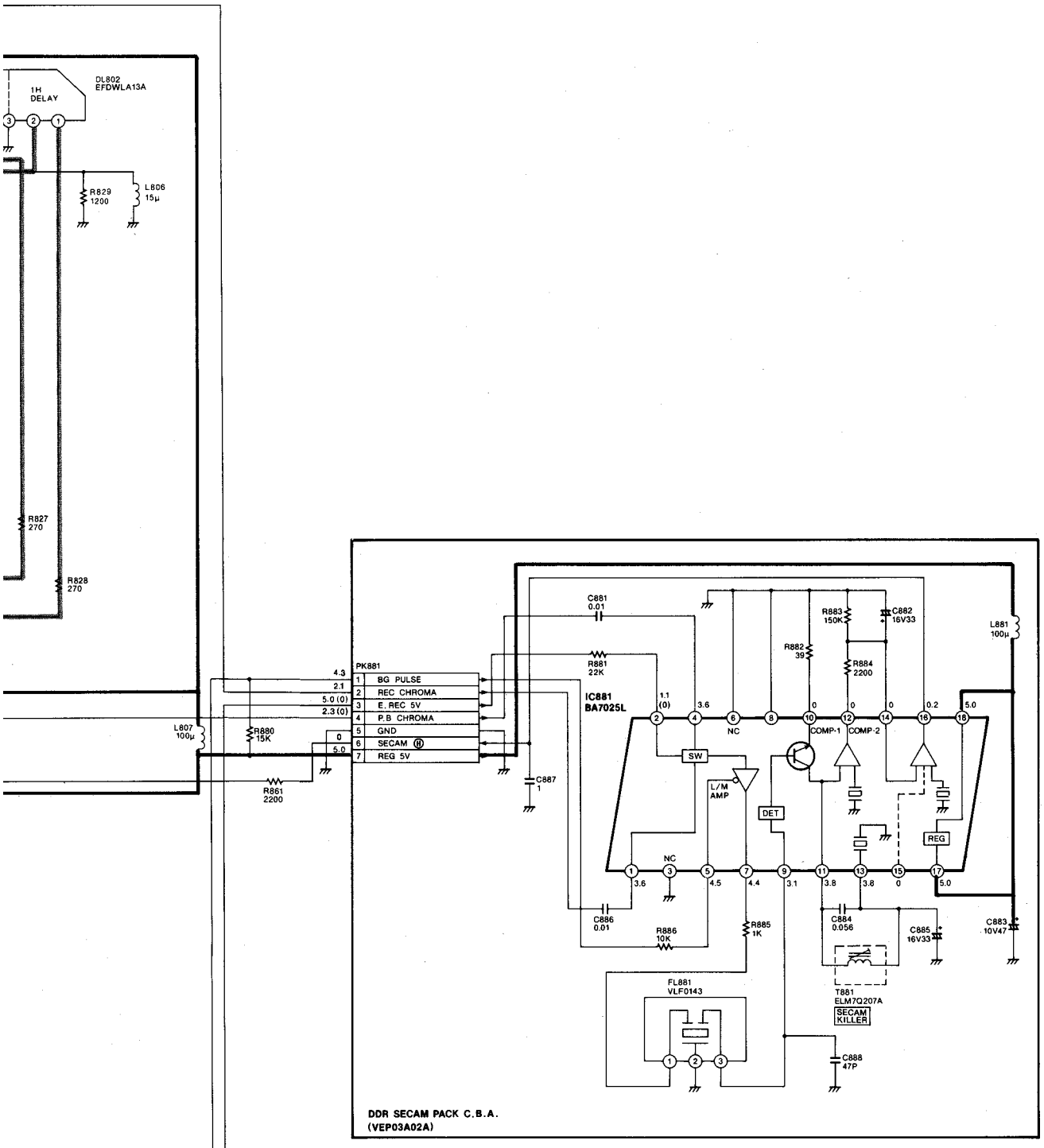
MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN



IAL PATH IN PLAYBACK MODE

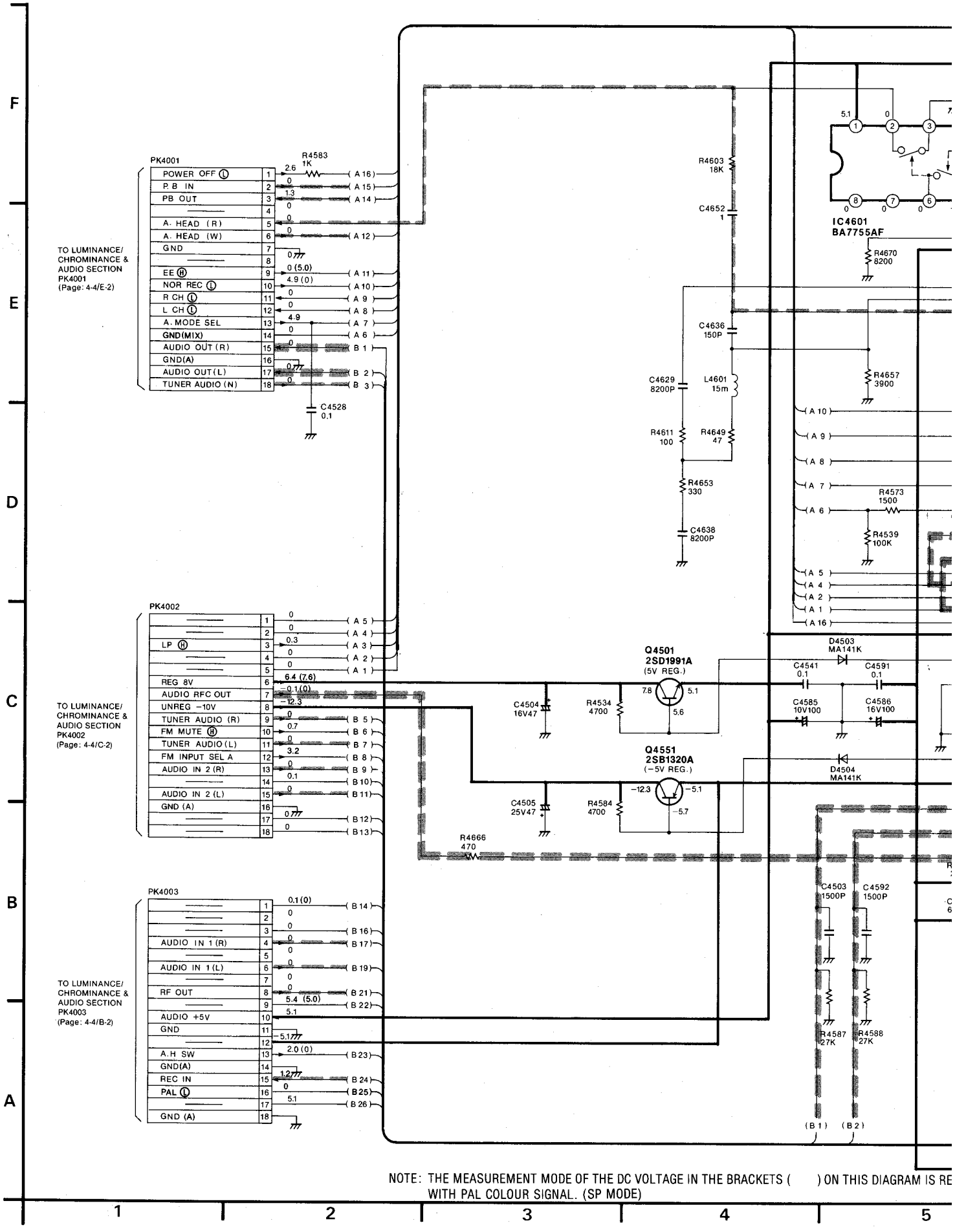


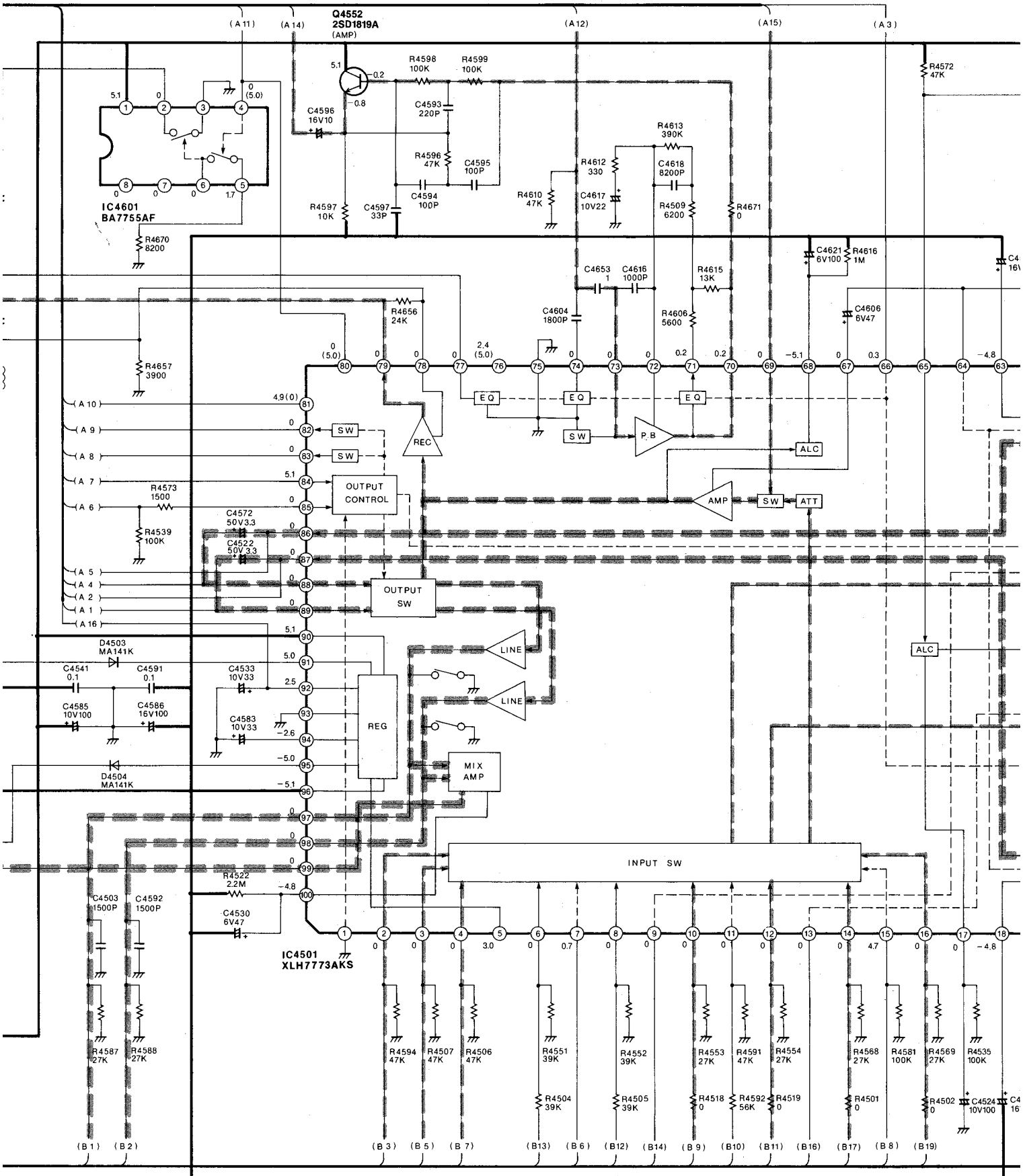


NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

4-10. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM

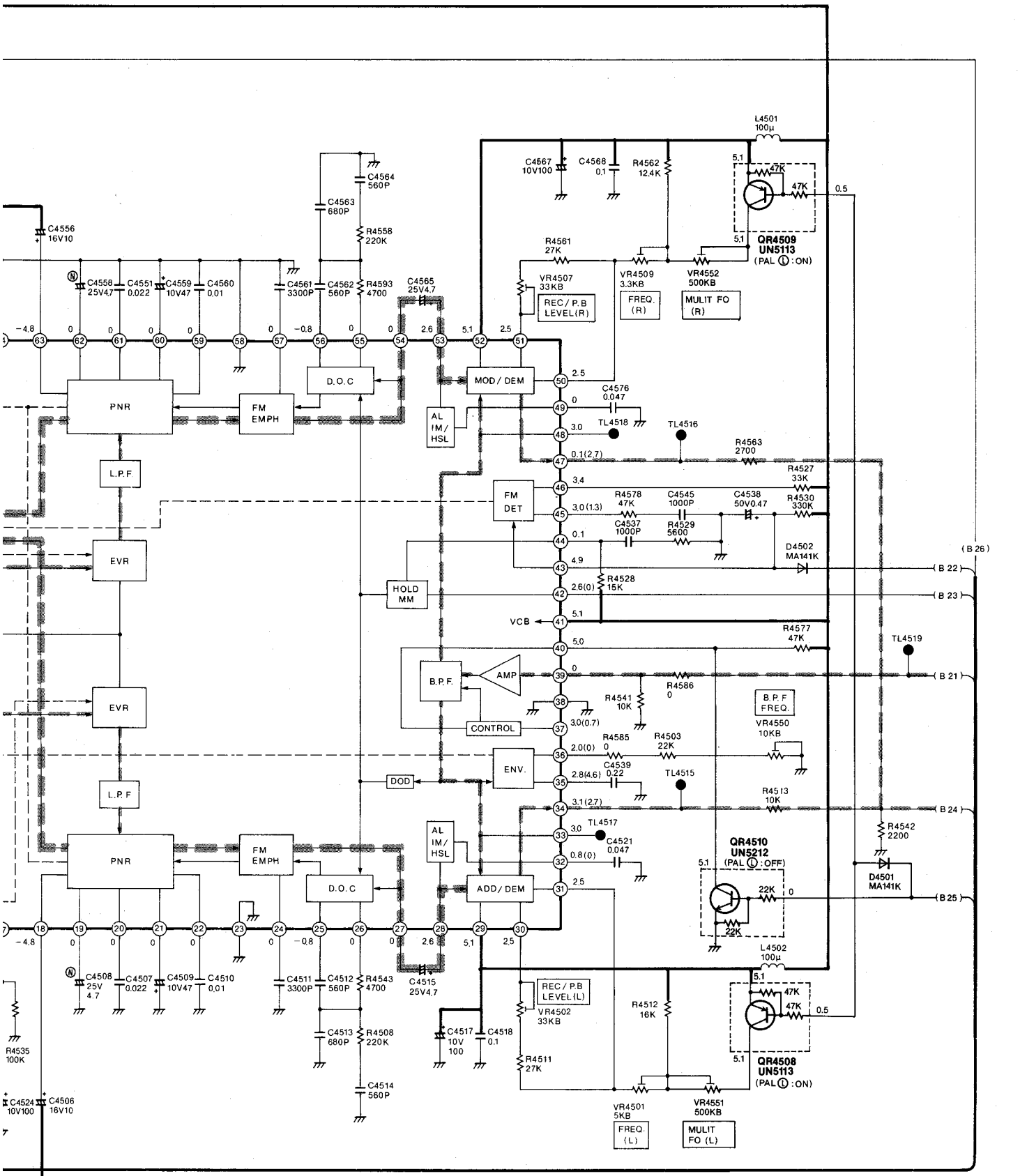




BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

NAL PATH IN REC MODE — — — MAIN SIGNAL PATH IN PLAYBACK MODE

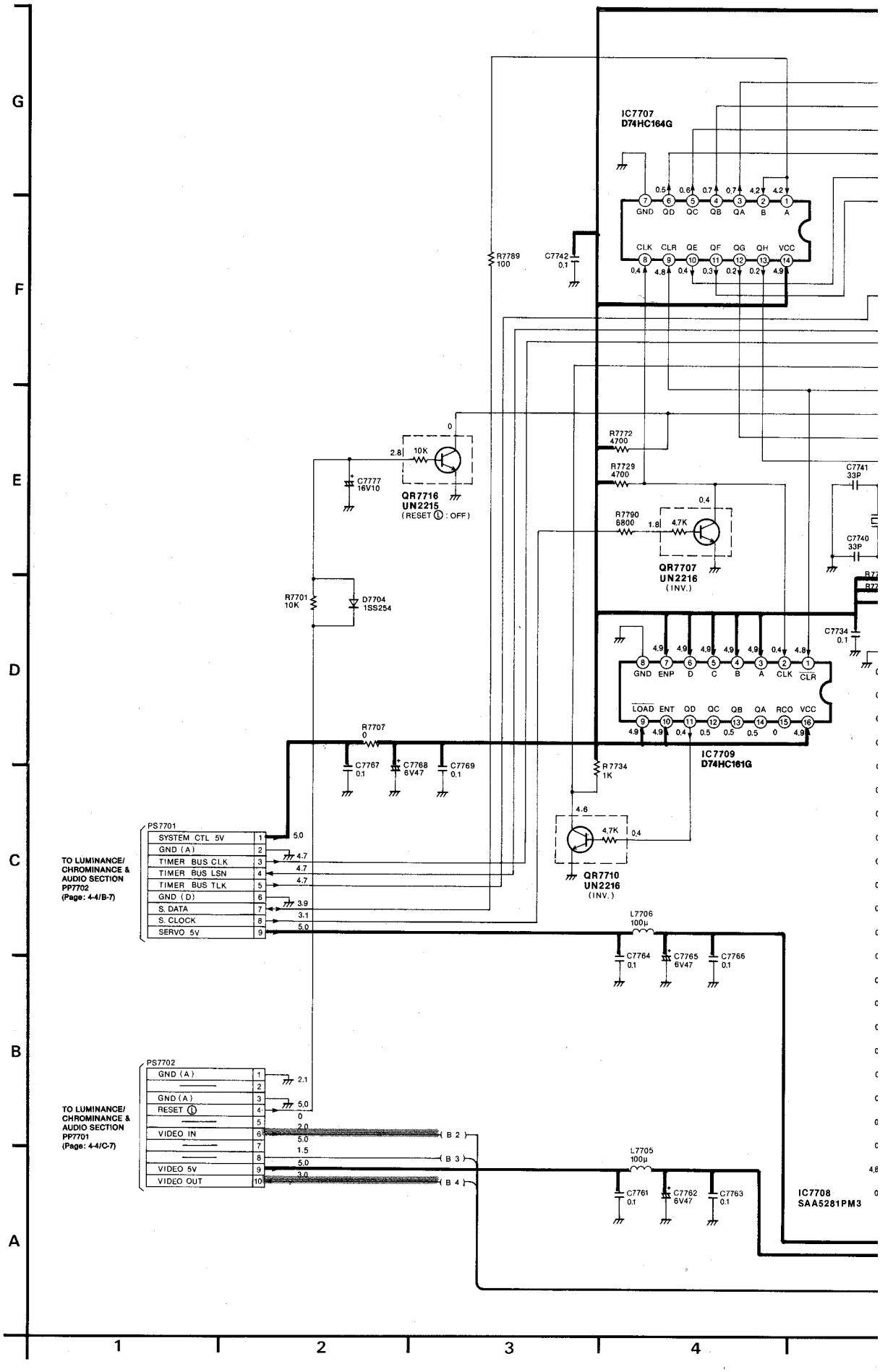


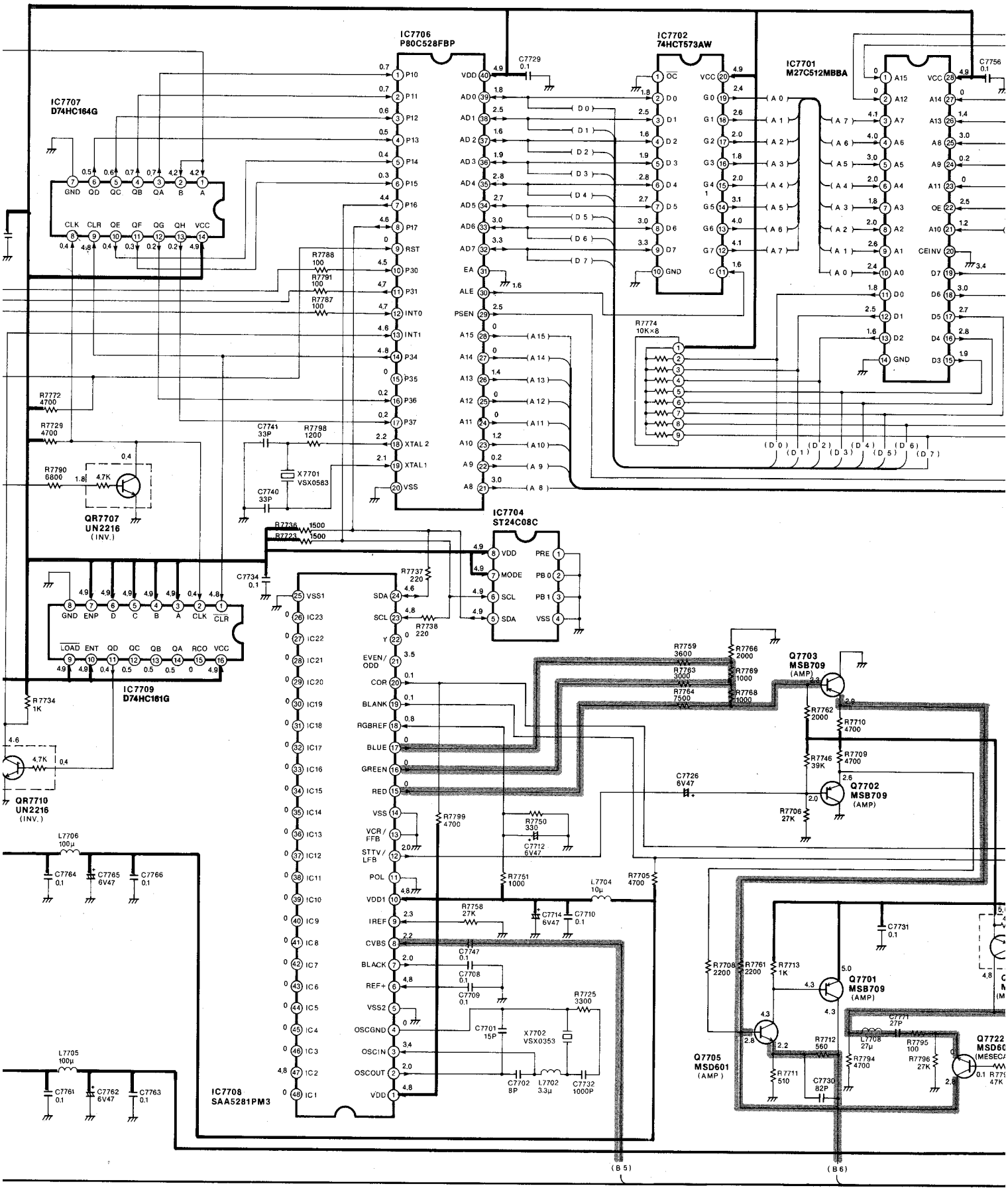
MODE

• LINE IN SIGNAL LEVEL... −10dB 1kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-12. OSD PACK SCHEMATIC DIAGRAM

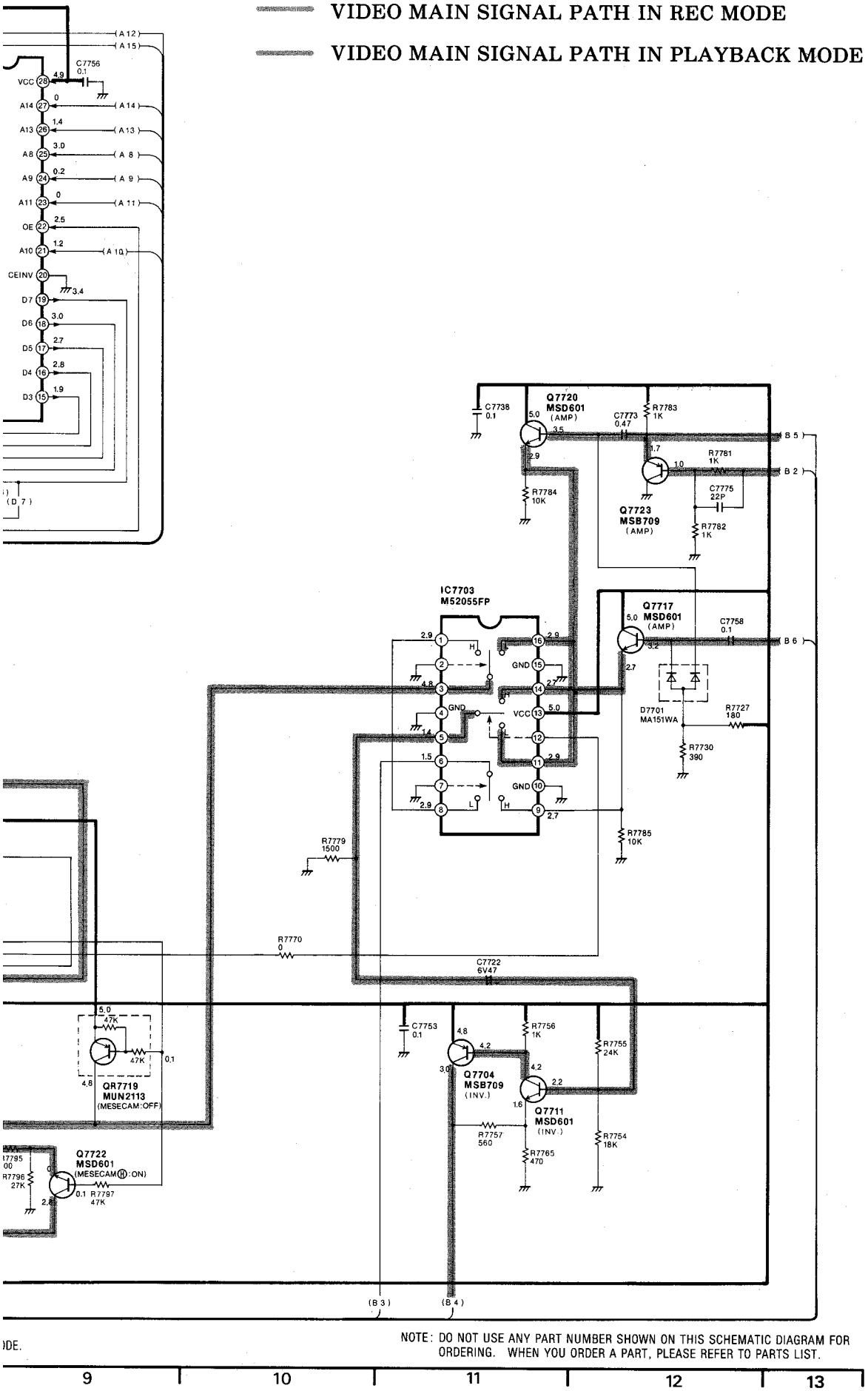




NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

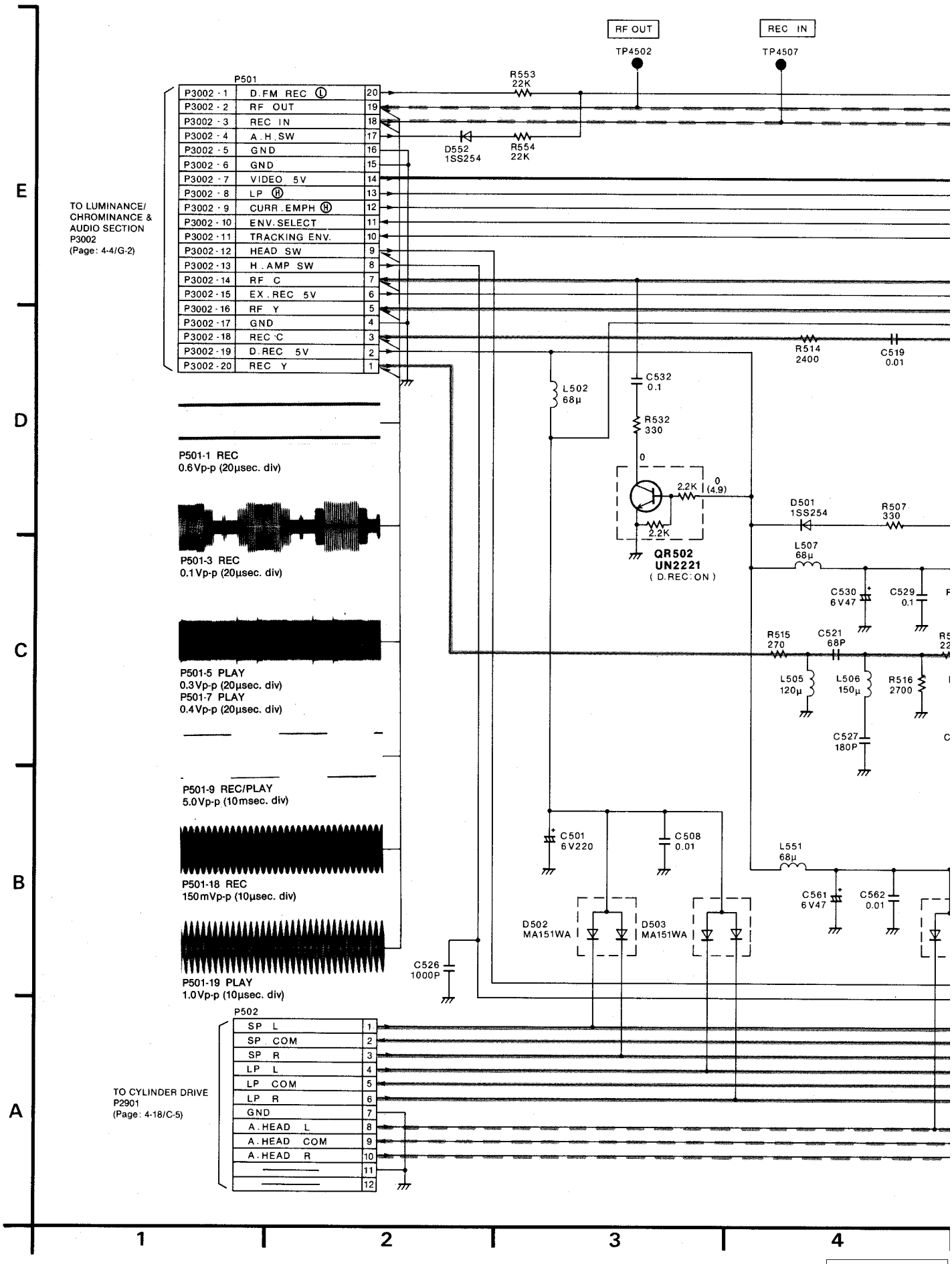


NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

)DE.

9 10 11 12 13

4-15. HEAD AMP SCHEMATIC DIAGRAM

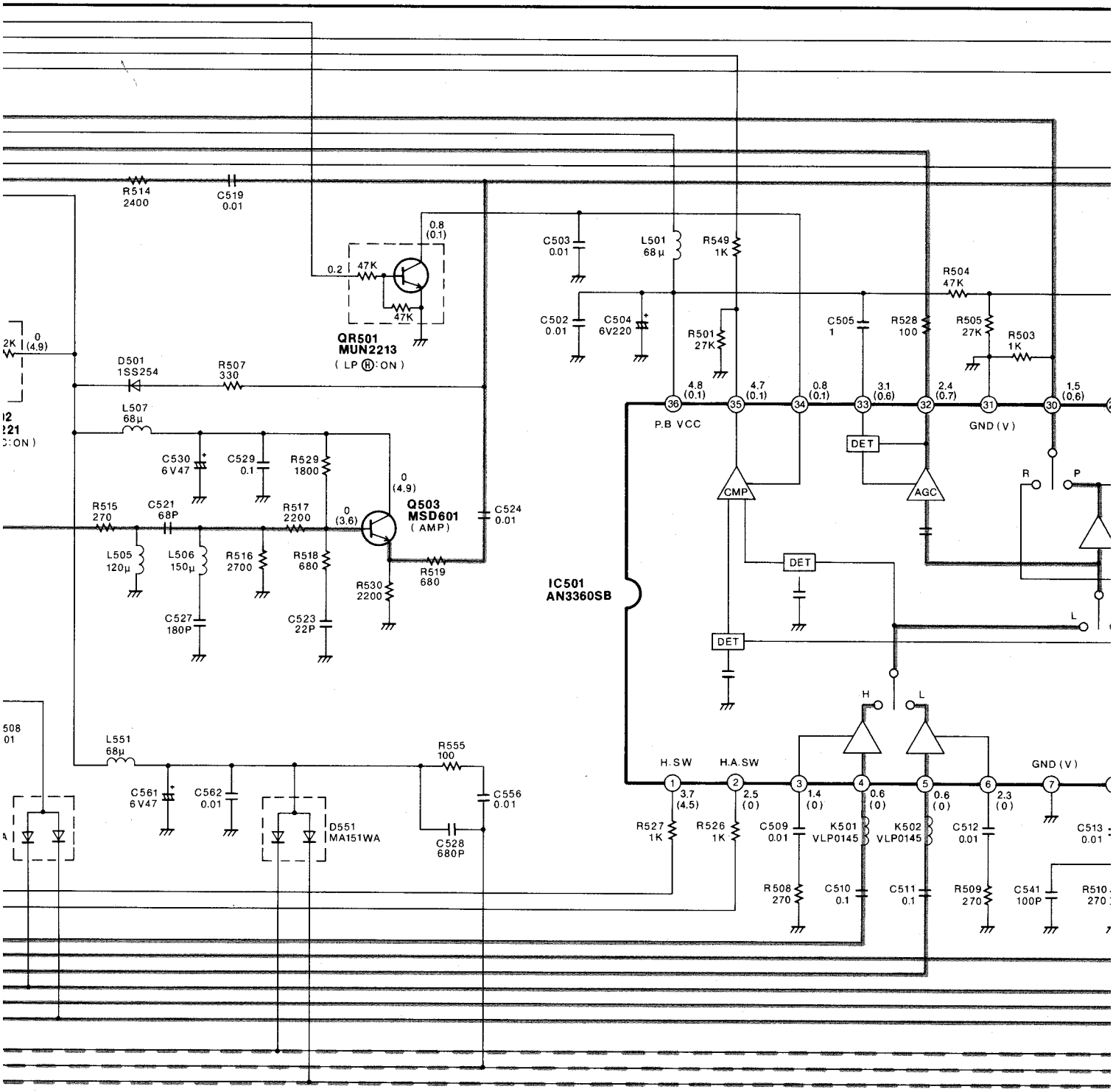


REC IN

TP4507

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

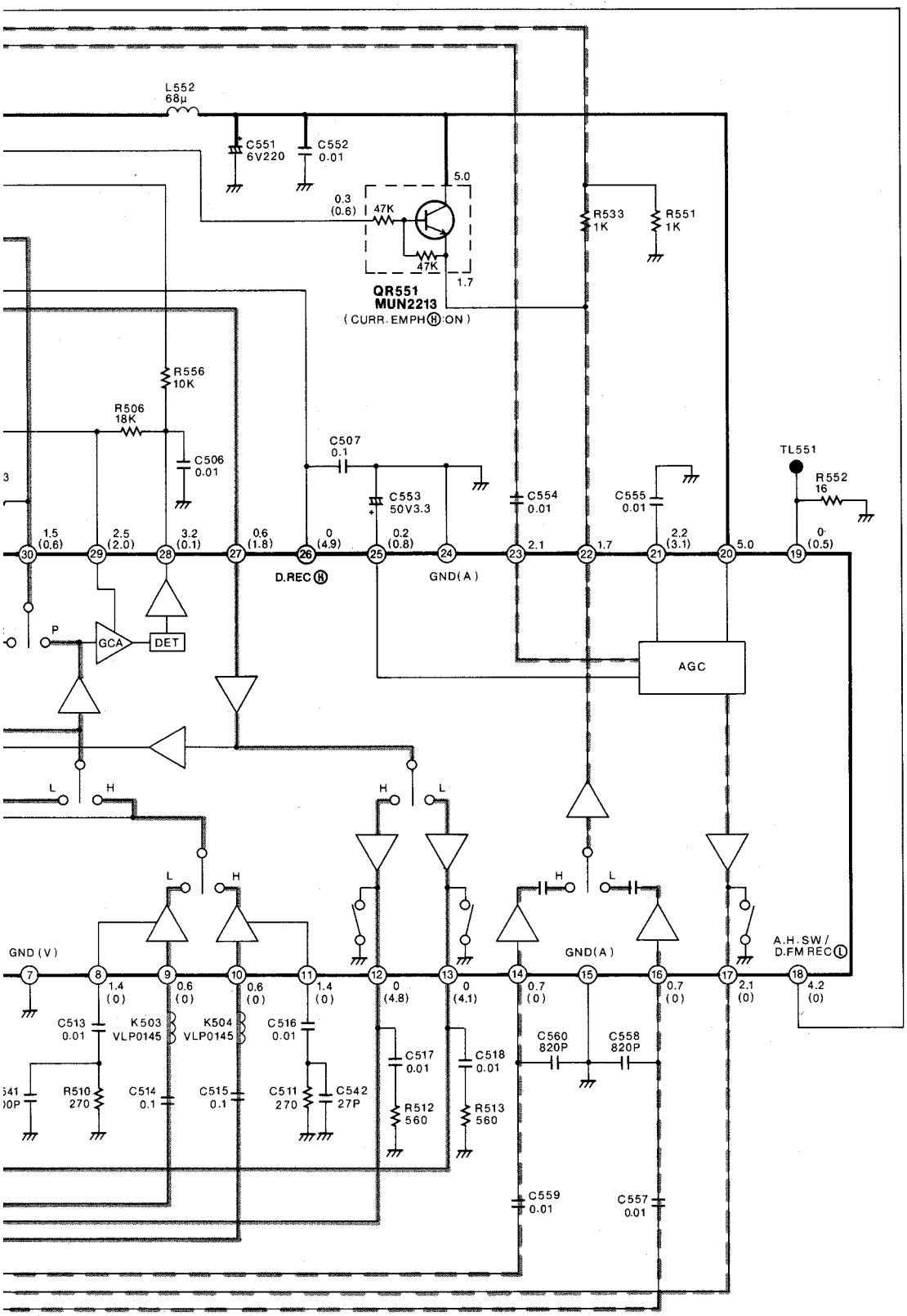


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

4 5 6 7

Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE

MODE Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



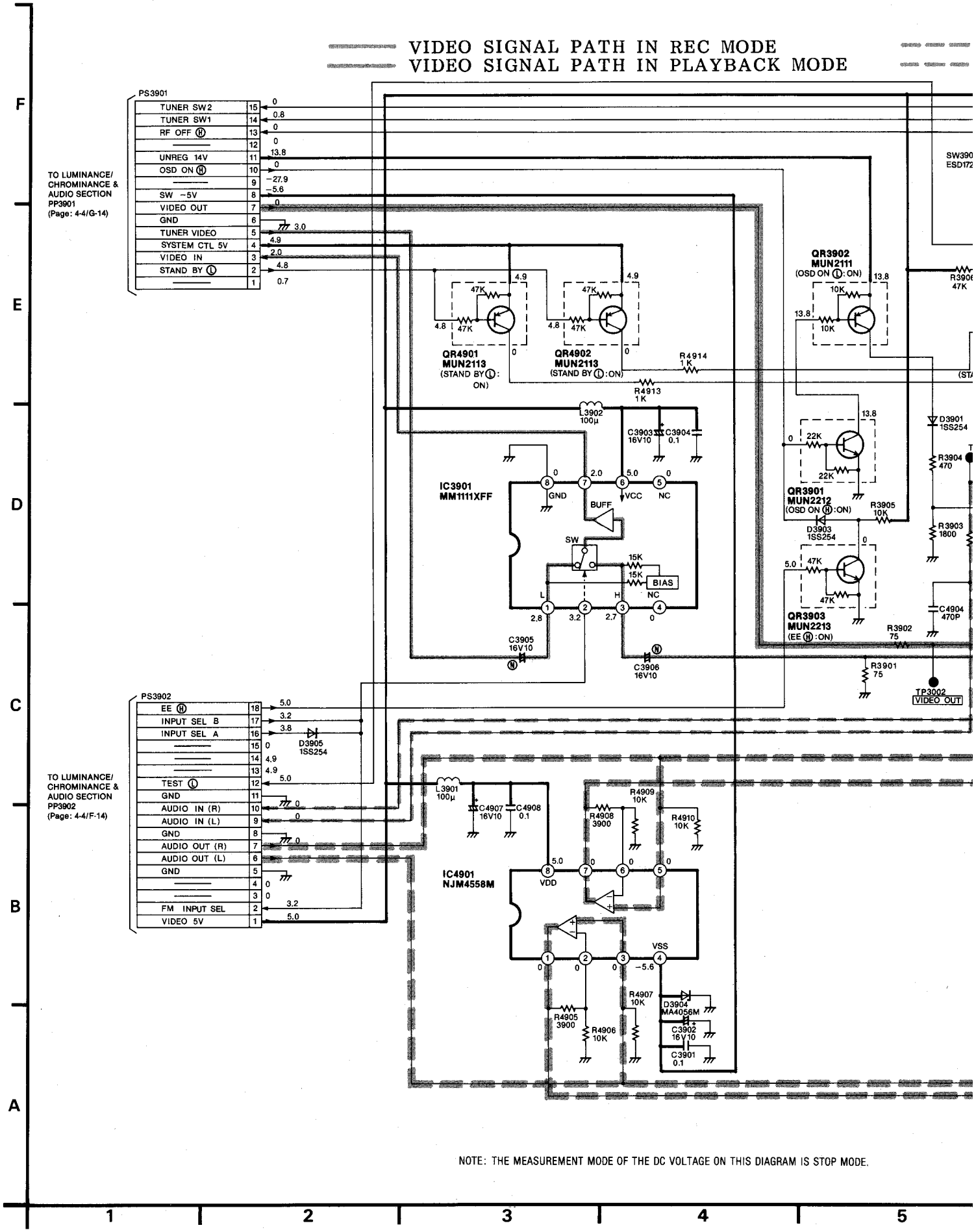
RECORD MODE

AYBACK MODE

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

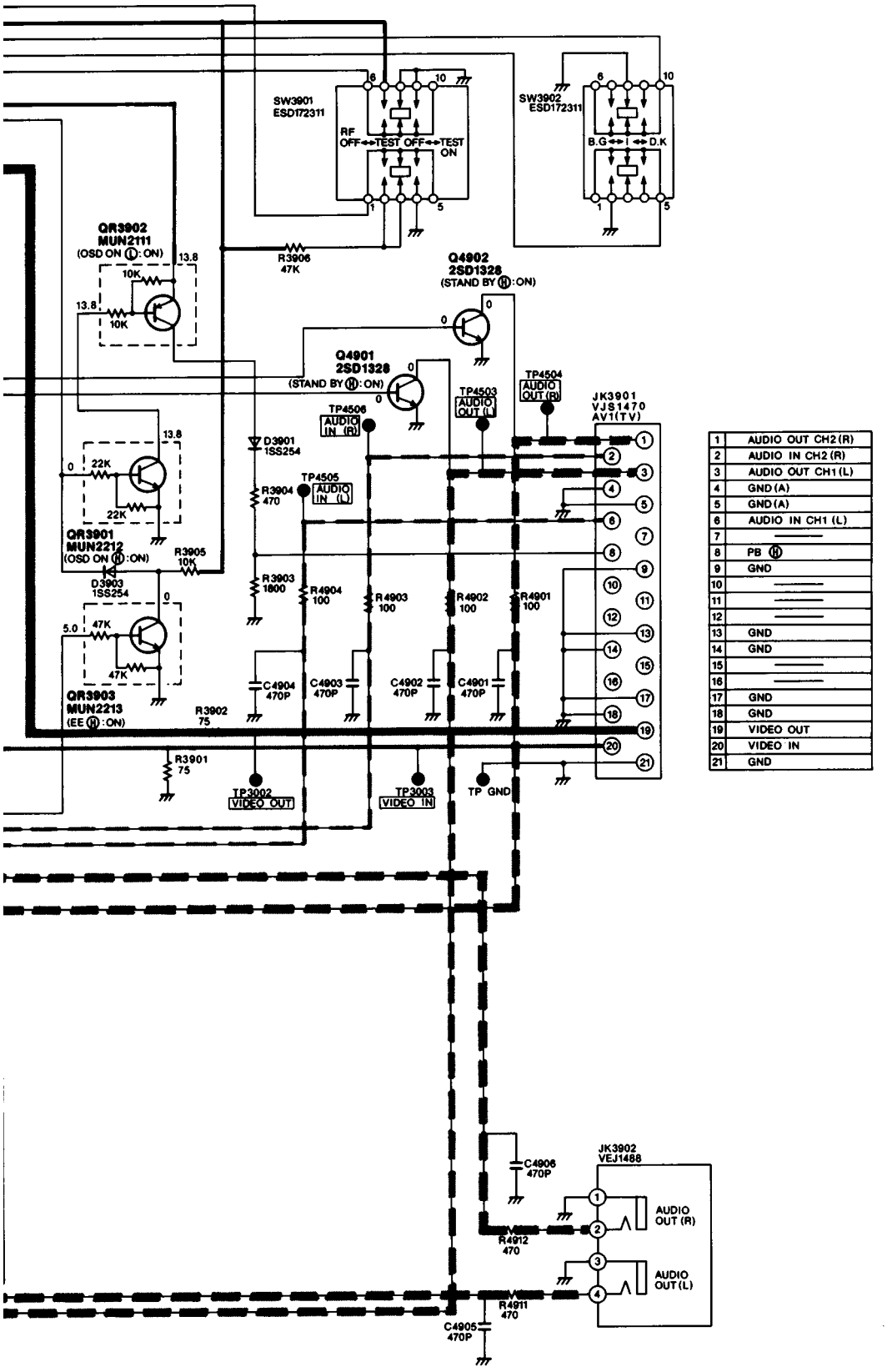
8 9 10

4-16. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

ODE — — — AUDIO SIGNAL PATH IN REC MODE
ACK MODE — — — AUDIO SIGNAL PATH IN PLAYBACK MODE



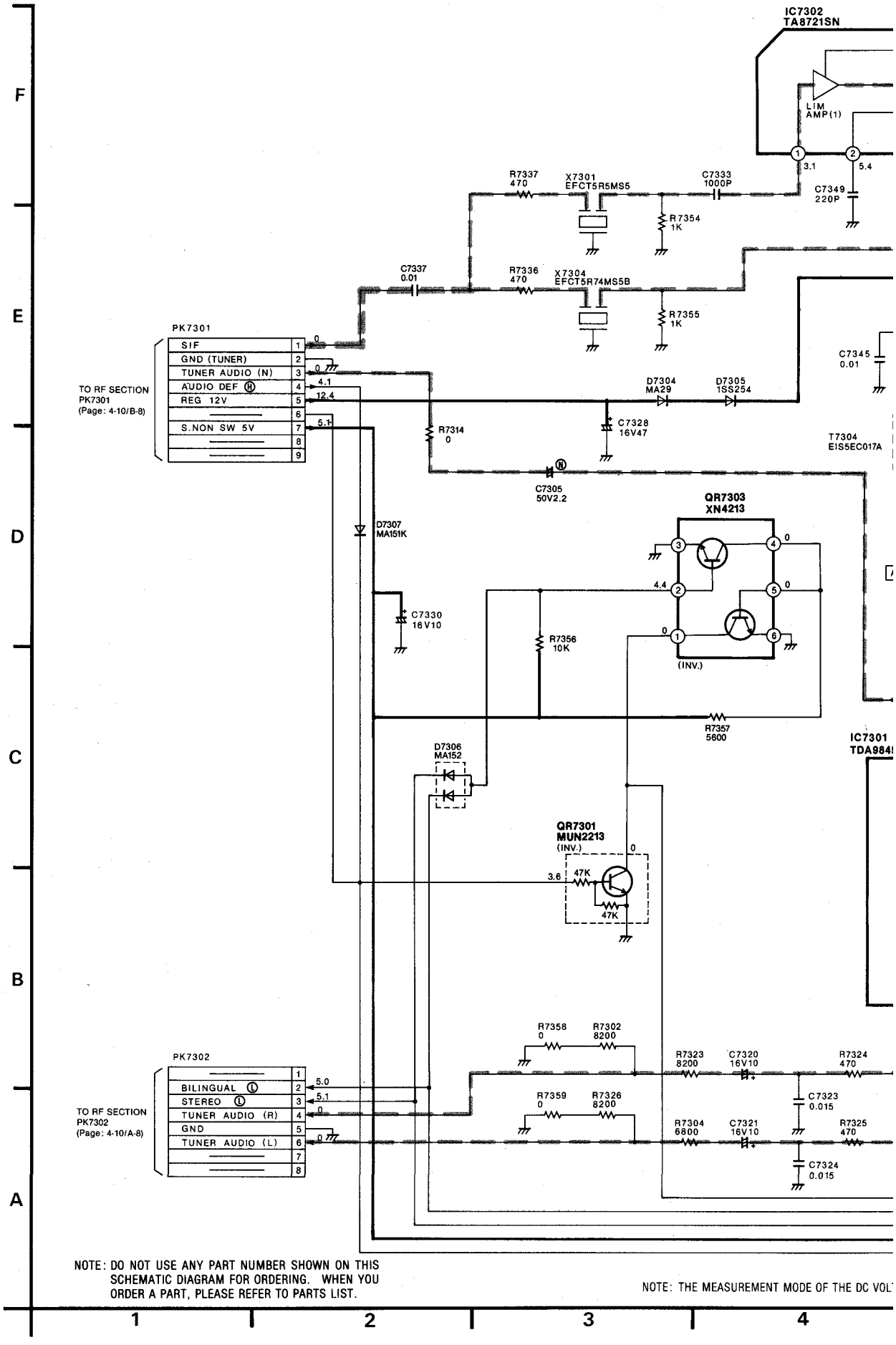
1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (A)
6	AUDIO IN CH1 (L)
7	——
8	PB Ⓗ
9	GND
10	——
11	——
12	——
13	GND
14	GND
15	——
16	——
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN
21	GND

HIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

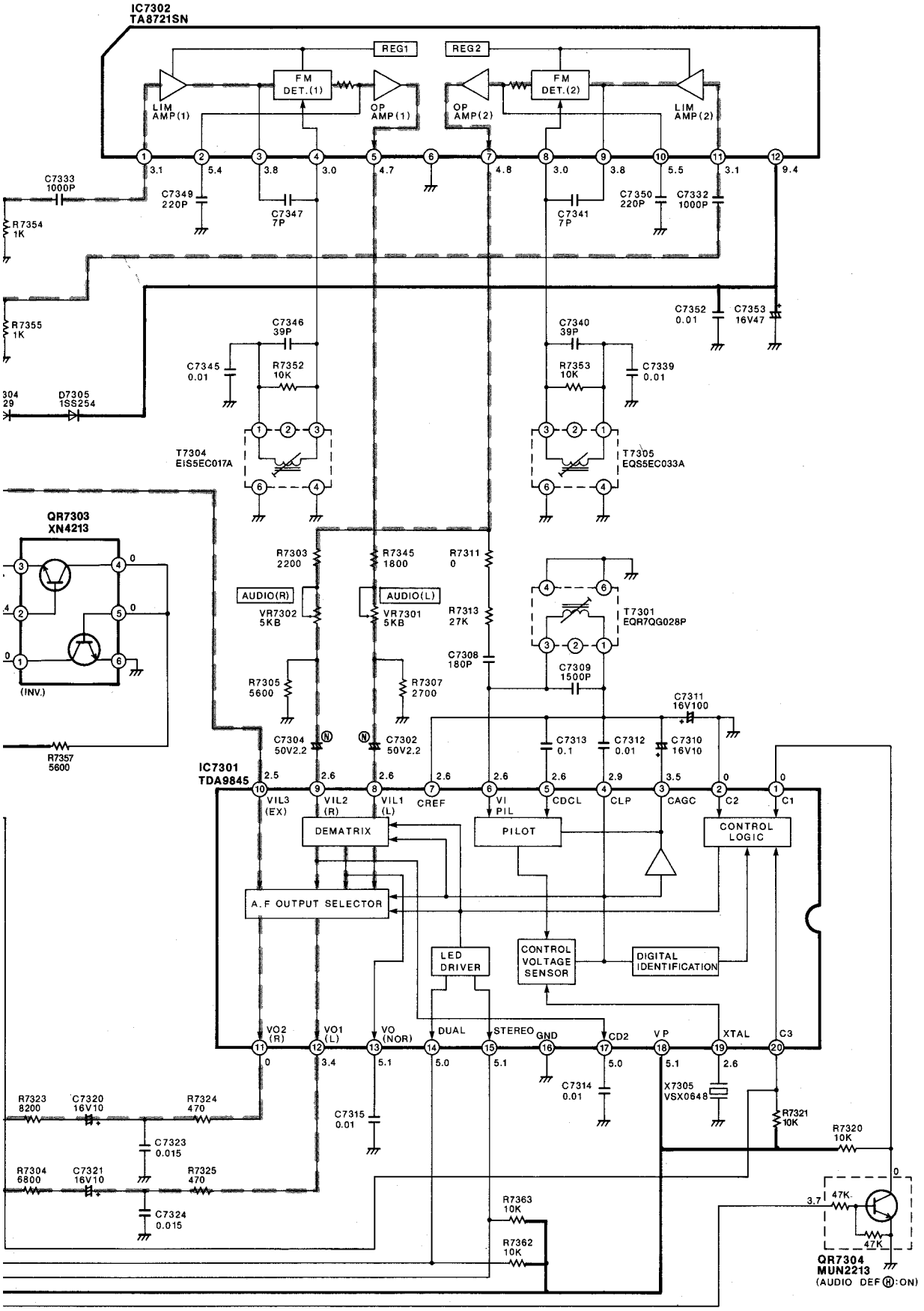
5 6 7

4-18. DECODER PACK SCHEMATIC DIAGRAM



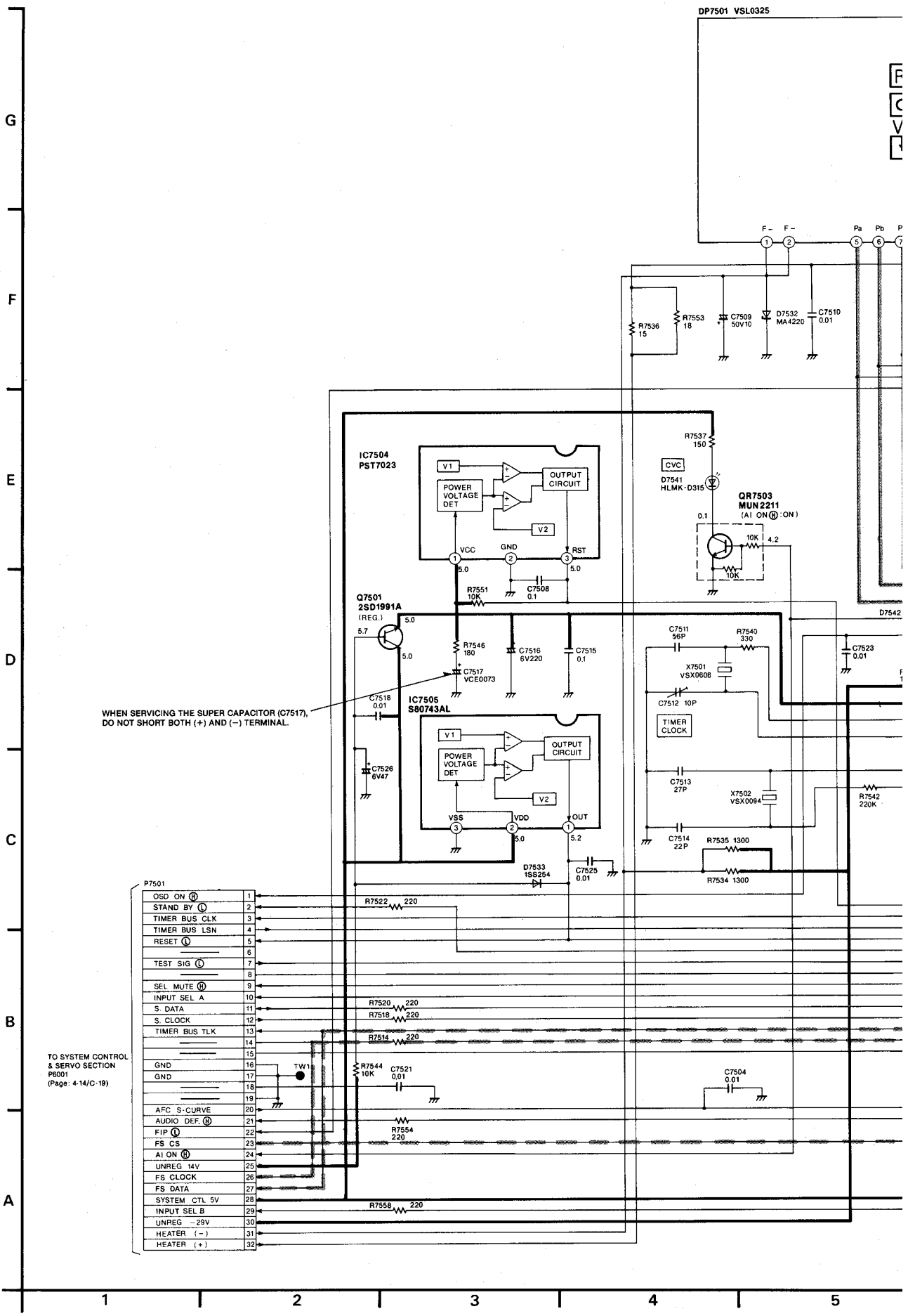
AUDIO MAIN SIGNAL PATH

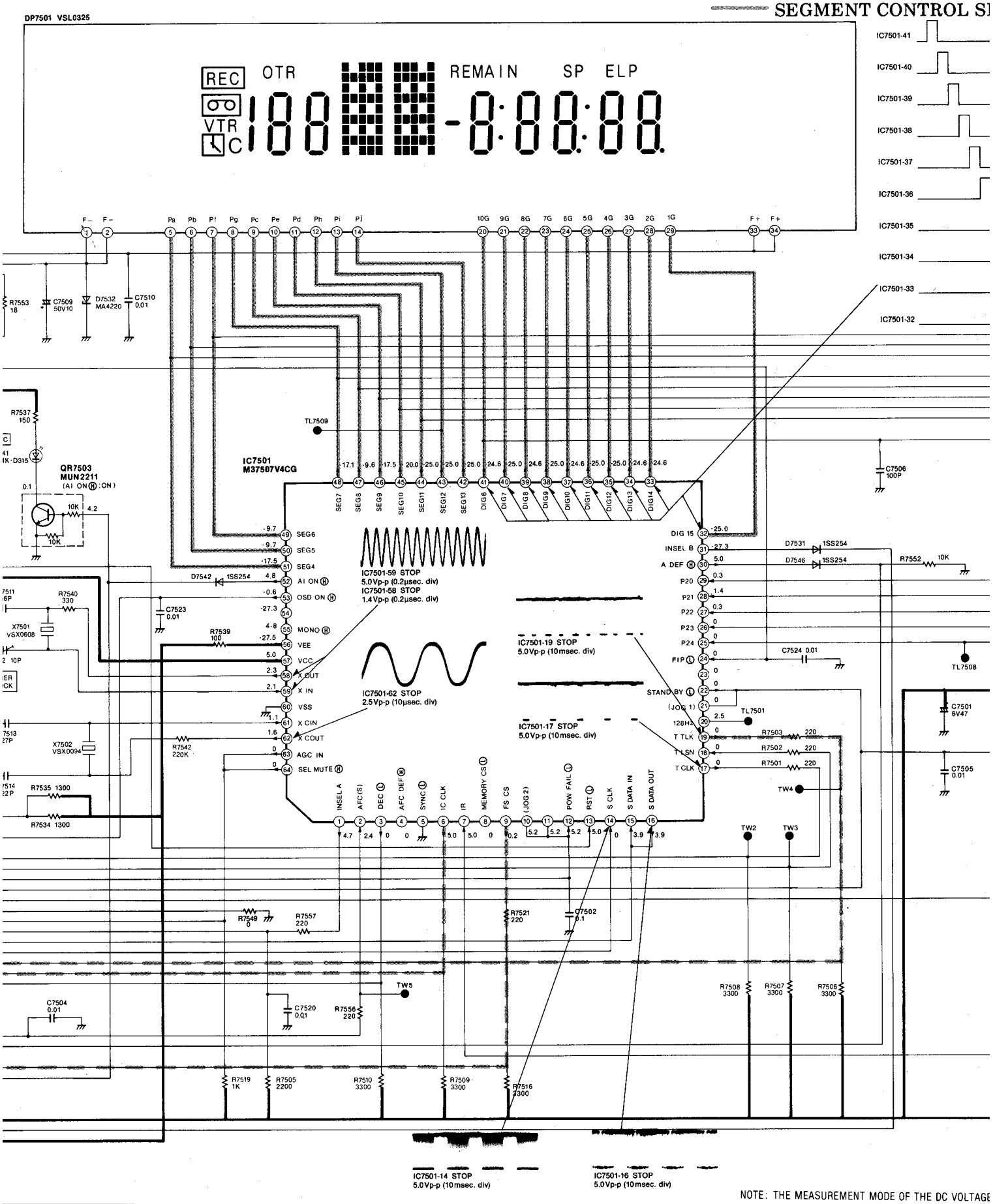
AUDIO SUB SIGNAL PATH



'E: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

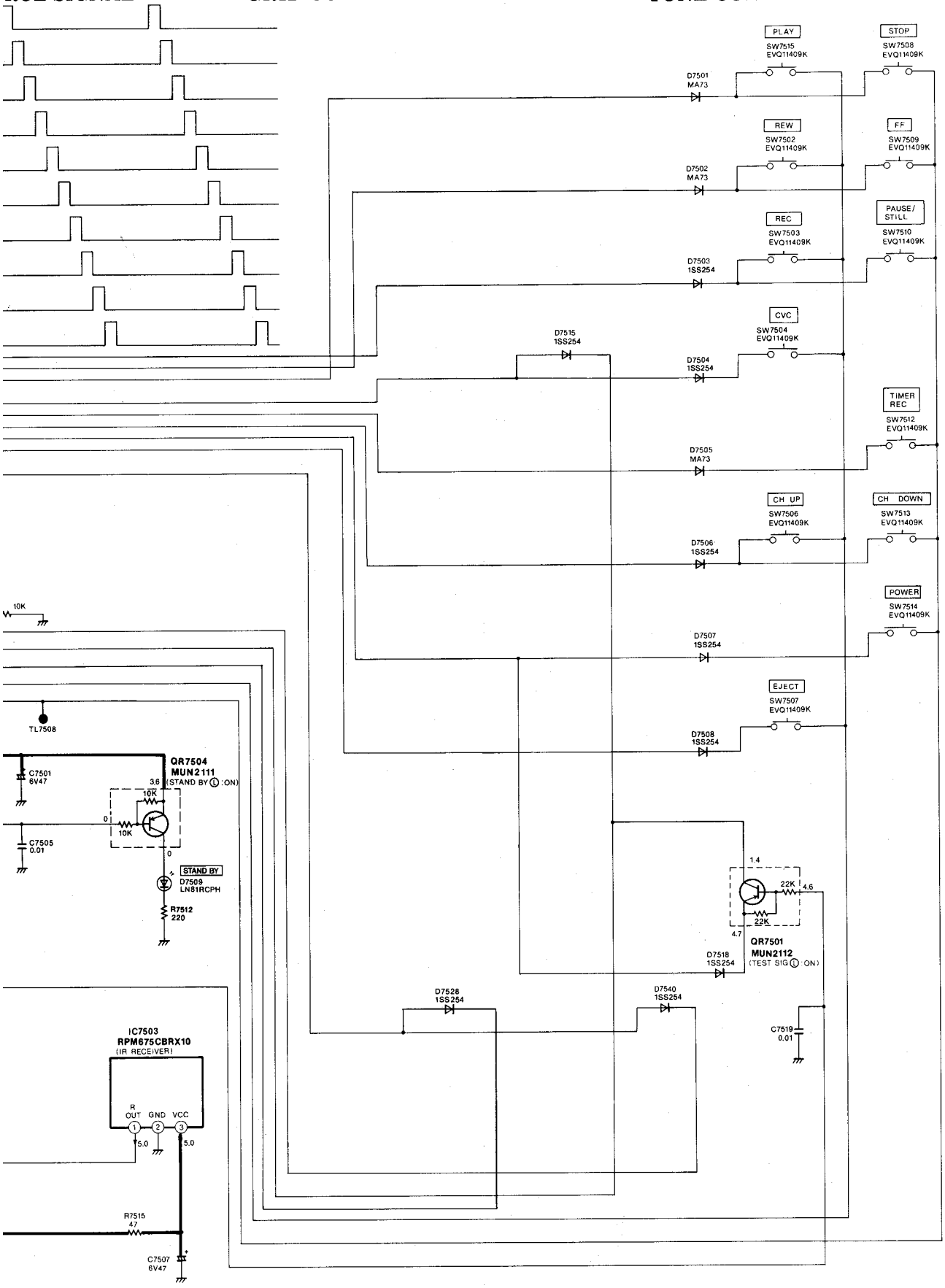
4-20. TIMER SCHEMATIC DIAGRAM





NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE

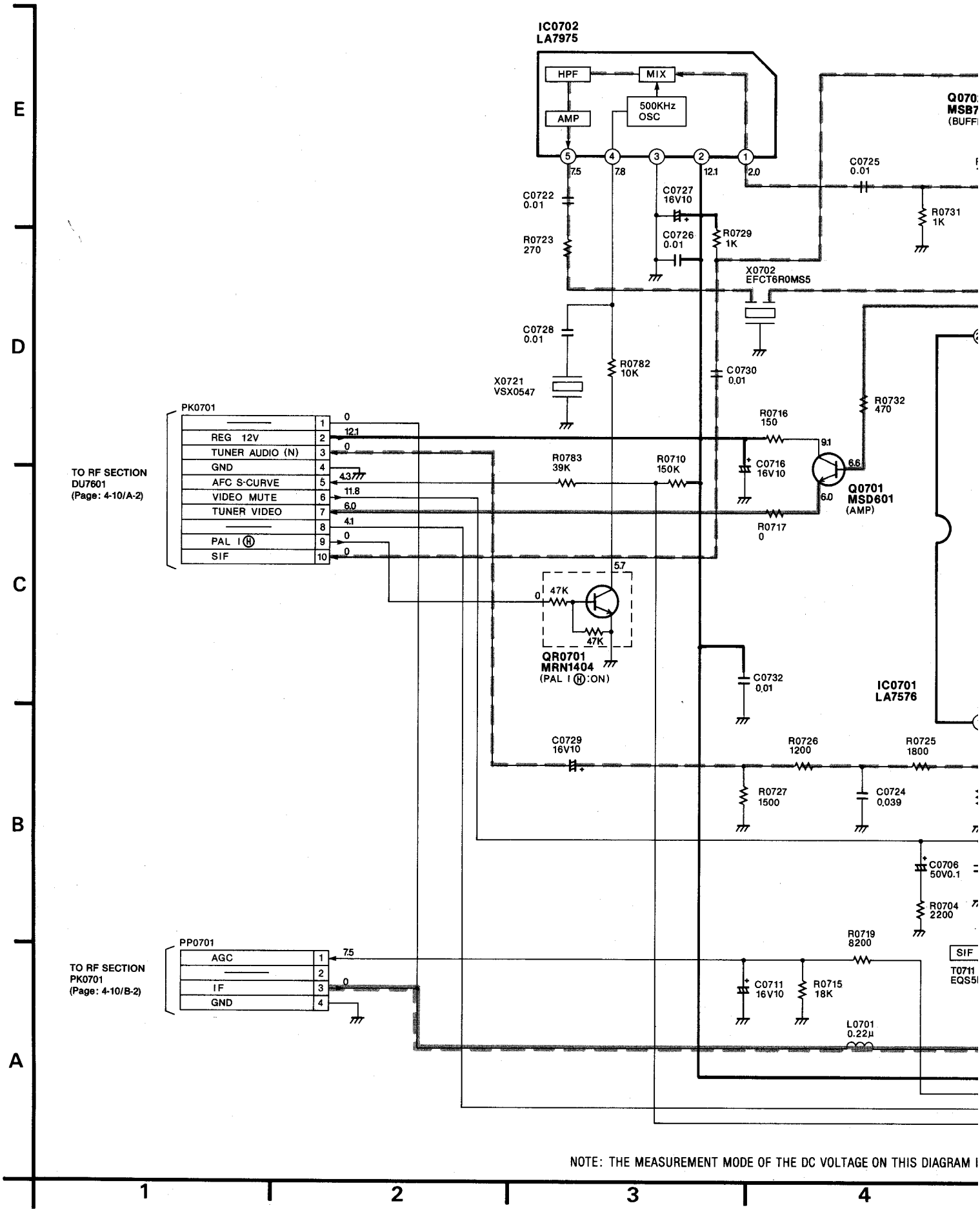
'ROL SIGNAL ——— GRID CONTROL SIGNAL - - - - TUNE CONTROL SIGNAL



E DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

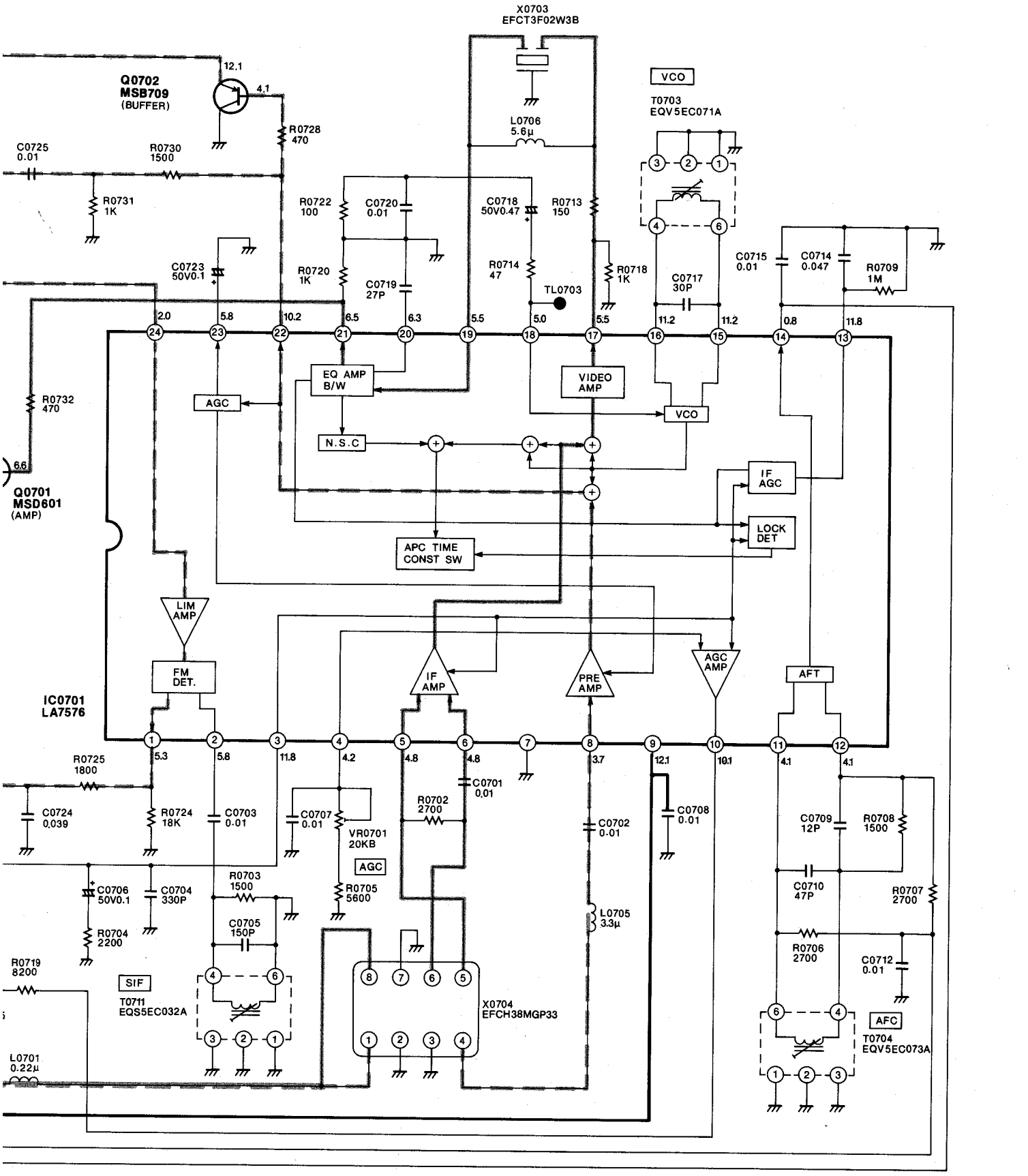
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-22. TV DEMODULATOR PACK SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM I

VIDEO SIGNAL PATH — — — AUDIO SIGNAL PATH



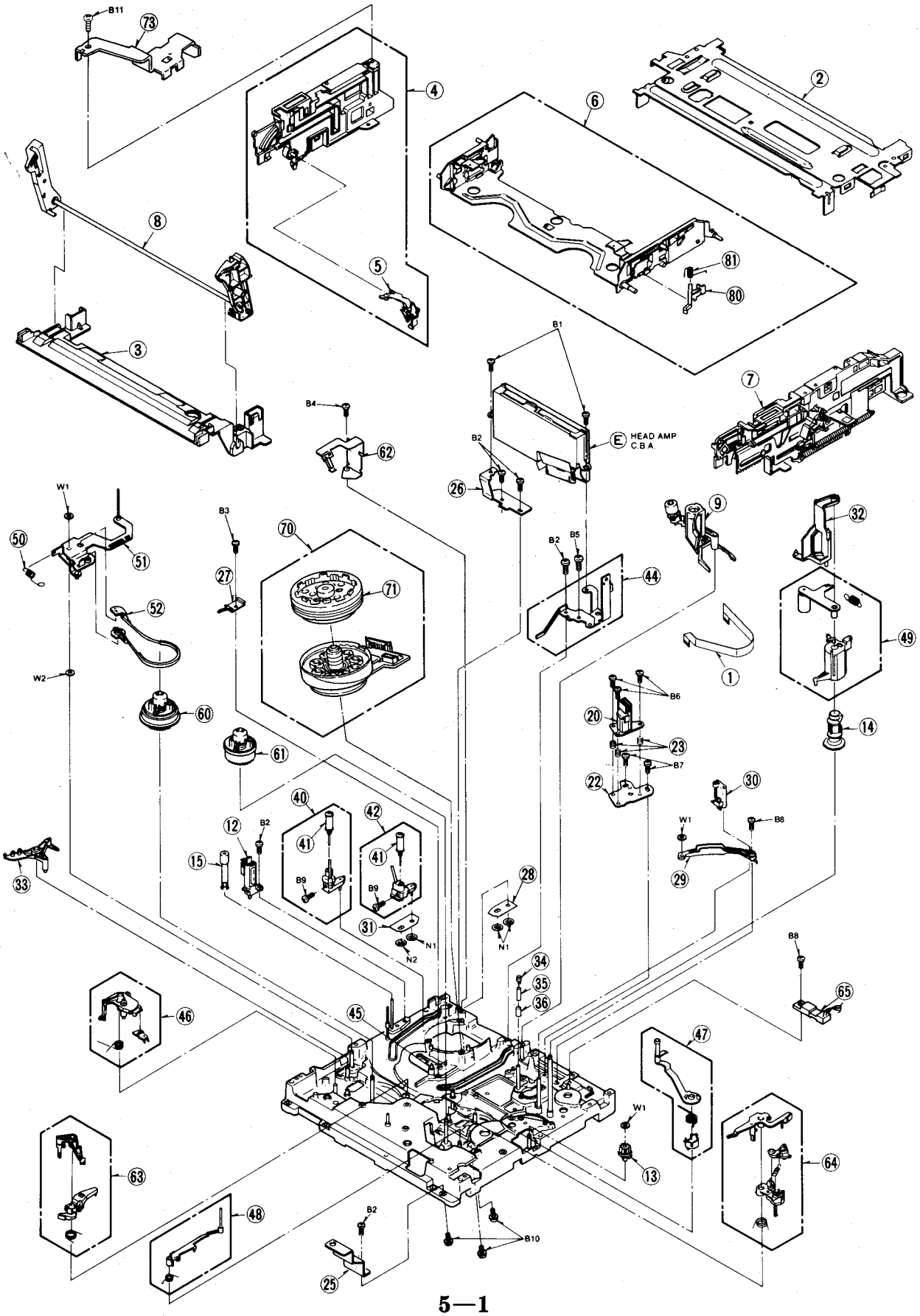
TAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SECTION 5
EXPLODED VIEWS & PARTS LIST

5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)



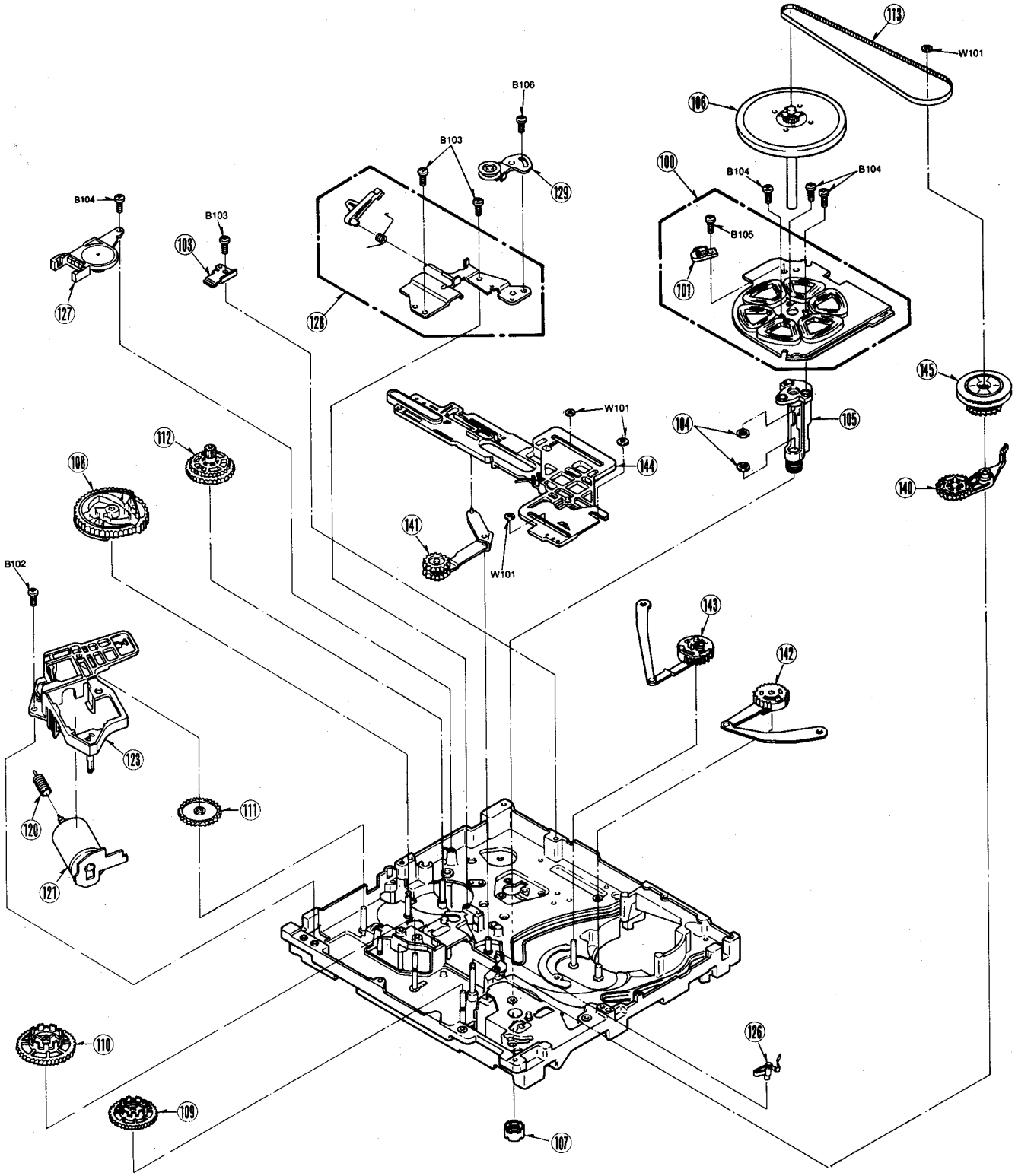
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
**********		NV-HD600EE			
1(1)		VWJ0743	FLEXIBLE CABLE (6P)	1	P4002-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VML2902	OPENER LEVER	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2440	CLEANER ARM UNIT	1	
12(1)		VBS0052	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0217	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA9158	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2394	TAKE UP TENSION REGULATOR	1	
			ARM UNIT		
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXZ0310	TENSION BAND UNIT	1	
60(1)		VXR0236	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0237	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0131	EARTH PLATE	1	
63(1)		VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXZ0313	TAKE UP BRAKE ARM UNIT	1	
65(1)		2SB1370YD01E	POWER TRANSISTOR	1	
70(1)		VEG1177	CYLINDER UNIT	1	
71(1)		VXP1515	UPPER CYLINDER UNIT	1	
73(1)		VMA9201	CYLINDER ANGLE	1	
80(1)		VML2680	RELEASE LEVER	1	
81(1)		VMB2013	RELEASE SPRING	1	
B1(1)		VHD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	5	
B3(1)		XTV26+4F	SCREW	1	
B4(1)		XTN3+6FFZ	SCREW	1	
B5(1)		XTV26+10F	SCREW	1	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	2	
B9(1)		XQN2+AJ4	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		XTS26+8G	SCREW	1	
N1(1)		VHN0192	NUT	3	
N2(1)		VHN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV26D5G	WASHER	1	

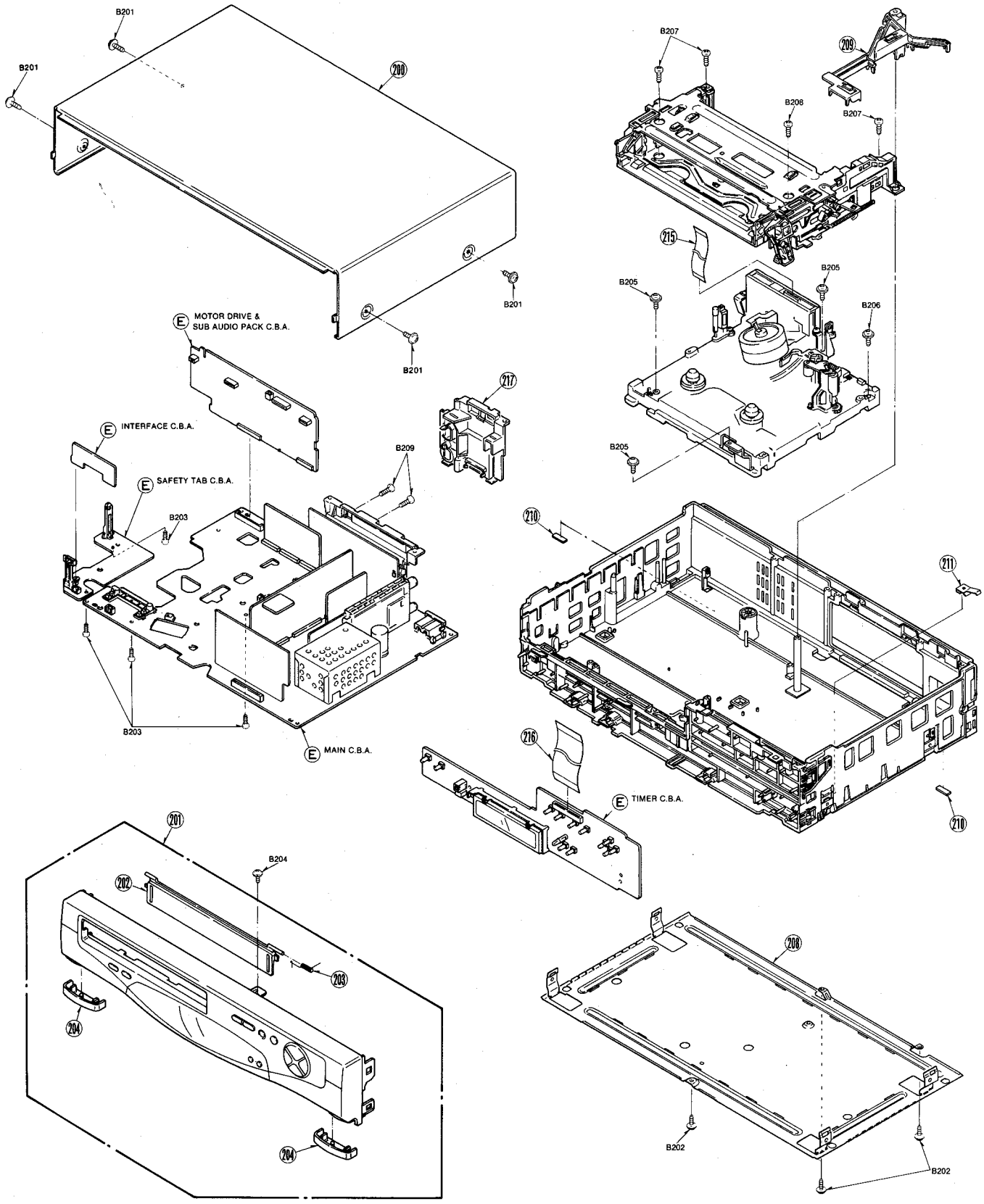
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	CAPSTAN STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8930	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1519	CAPSTAN ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0956	SUPPLY REEL GEAR	1	
110(2)		VDG0957	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VXA5138	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2378	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
B102(2)		XTV26+8F	SCREW	1	
B103(2)		XTV26+6F	SCREW	3	
B104(2)		VHD0753	SCREW	4	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26+4FZ	SCREW	1	
W101(2)		VMX2208	WASHER	4	

❷ CHASSIS PARTS SECTION (2)



❸ CASING PARTS SECTION



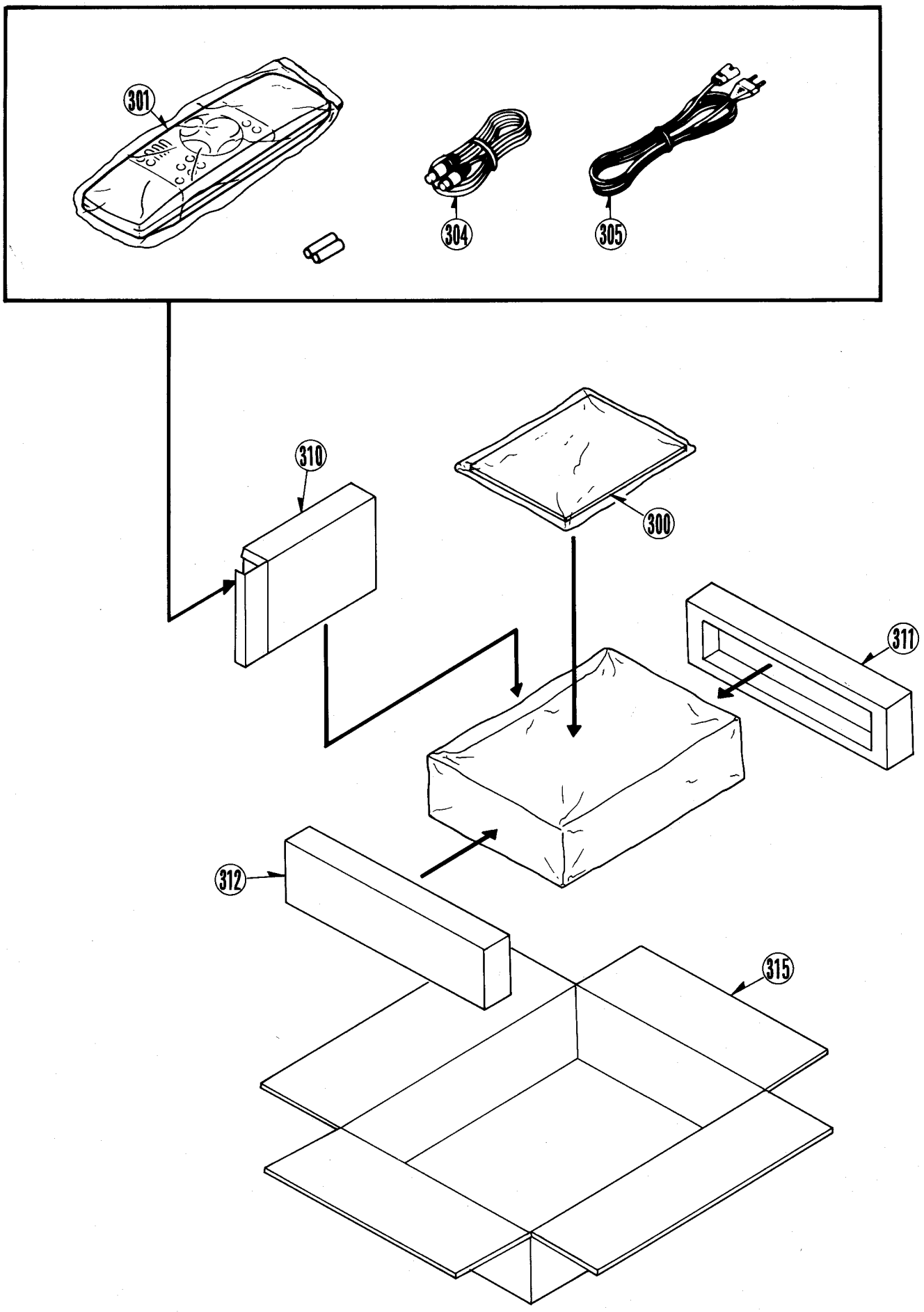
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VGM1105	TOP PANEL	1	
201(3)		VYP5787	FRONT PANEL UNIT	1	
202(3)		VKF2293	BLINDER PANEL	1	
203(3)		VMB2521	BLINDER SPRING	1	
204(3)		VKA0176	LEG	2	
208(3)		VKU0404	BOTTOM PLATE	1	
209(3)		VJF1134	PACK HOLDER	1	
210(3)		VKA0122	FOOT	2	
211(3)		VMC1065	EARTH SPRING	1	
215(3)		VWJ0875	FLAT CARD CABLE	1	P501-P3002
216(3)		VWJ32C9160BB	FLAT CARD CABLE	1	P6001-P7501
217(3)		VJH0790	ANTENNA JACK PLATE	1	
B201(3)		XTW3+10TFZ	SCREW	4	
B202(3)		VHD0059	SCREW	3	
B203(3)		VHD0772	SCREW	4	
B204(3)		VHD0773	SCREW	3	
B205(3)		VHD0168	SCREW	3	
B206(3)		VHD0874	SCREW	1	
B207(3)		XTV26+8FR	SCREW	3	
B208(3)		XTV26+10F	SCREW	1	
B209(3)		XTV3+8FZ	SCREW	2	

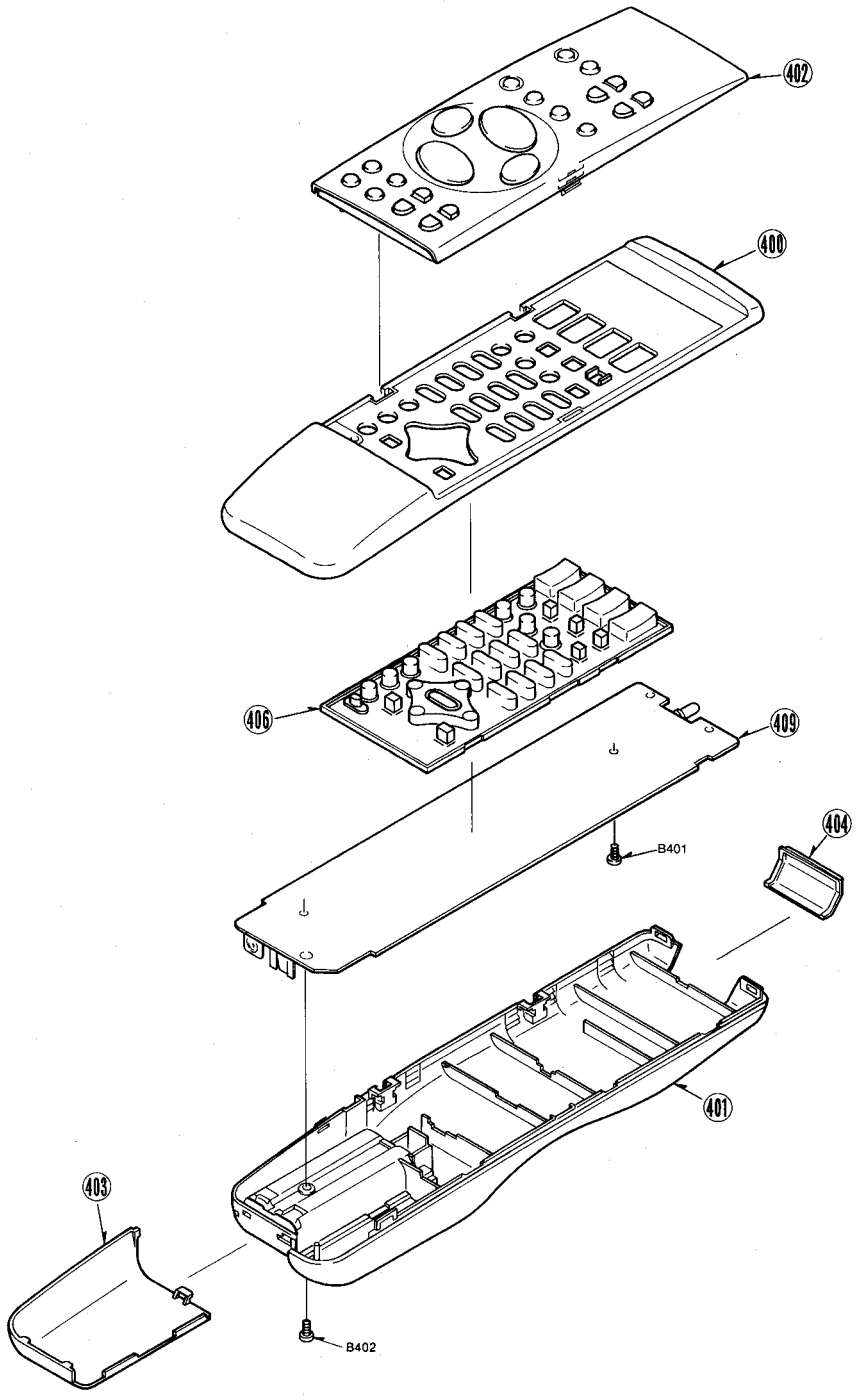
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT5907	OPERATING INSTRUCTIONS	1	<!>
			(ENGLISH/POLISH/RUSSIAN)		
300(4)		VQT5908	OPERATING INSTRUCTIONS	1	<!>
			(CZECHOSLVAK/HUNGARIAN		
			/GREEK)		
301(4)		VEQ1691	REMOTE CONTROLLER	1	
304(4)		VJA0376	DIN RF CABLE	1	
305(4)		VJA0664	AC CORD	1	<!>
310(4)		VPK0825	ACCESSORIES PAKING	1	
311(4)		VPN4034	CUSHION (R)	1	
312(4)		VPN4035	CUSHION (L)	1	
315(4)		VPG7877	PACKING	1	
			SERVICE FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0680	WHITE GREASE	1	
		VFK0851	CENTRE FIXING TOOL	1	
		VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
		VFK0939	13P EXTENSION CABLE	1	
		VFK0678	18P EXTENSION CABLE	1	
		VFK0917	11P EXTENSION CABLE	1	
		VFK0918	17P EXTENSION CABLE	1	

❹ PACKING PARTS SECTION



❺ REMOTE CONTROLLER UNIT



Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
400(5)		VYK6513	TOP COVER UNIT	1	
401(5)		VYK5446	BOTTOM COVER UNIT	1	
402(5)		VYK6388	DOOR PANEL UNIT	1	
403(5)		VKF2115	BATTERY COVER	1	
404(5)		VKW1802	IR WINDOW	1	
406(5)		VSP0870	RUBBER CONTACT	1	
409(5)		----------	REMOTE CONTROLLER C.B.A.	1	THE C.B.A. IS NOT
					SUPPLIED AS SPARE
					PART.
B401(5)		XTB2+6G	SCREW	1	
B402(5)		XTB2+8GFZ	SCREW	1	

5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4. The P.C.Board units marked width'■'show below the main assembled parts.
5. The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP06976J	MAIN C.B.A.	1	(RTL)<!>
			(Page:5-8)		INCLUDING THE
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03B46B),
					SECAM PACK C.B.A.
					(VEP03A02A),
					Hi-Fi AUDIO PACK
					C.B.A.(VEP04447PL),
					OSD PACK C.B.A.
					(VEP06993B),
					DECORDER PACK C.B.A.
					(VEP07784B),
					TV DEMODULATOR PACK
					C.B.A.(VEP07801H).
		VEP03B46B	LUMINANCE & CHROMINANCE	1	(RTL)
			PACK C.B.A.		INCLUDING THE SECAM
					PACK C.B.A.
					(VEP03A02A).
					INCLUDED IN MAIN
					C.B.A.(VEP06976J).
		VEP03A02A	SECAM PACK C.B.A.	1	(RTL)
					INCLUDED IN
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03B46B).
		VEP04447PL	Hi-Fi AUDIO PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06976J).
		VEP06993B	OSD PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06976J).
		VEP07784B	DECORDER PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06976J).
		VEP07801H	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEP06976J).
		VEP03C03B	INPUT/OUTPUT PACK C.B.A.	1	(RTL)
			(Page:5-15)		
		VEP04469F	MOTOR DRIVE C.B.A.	1	(RTL)
			(Page:5-16)		
		VEP05204A	HEAD AMP C.B.A.	1	(RTL)
			(Page:5-16)		
		VEP07817D	TIMER C.B.A.	1	(RTL)
			(Page:5-17)		
		VEP00U88A	MAIN INTERFACE C.B.A.	1	(RTL)
			(Page:5-18)		
		VEP00U71A	S-TAB C.B.A.	1	(RTL)
			(Page:5-18)		
		----------	MOTOR C.B.A.	1	C.B.A. IS INCLUDED

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			(Page:5-18)		IN LOADING MOTOR (1)
					UNIT (VEM0427).
		VEX0129	CYLINDER DRIVE C.B.A.	1	(RTL)
			(Page:5-18)		
		ENG47226G	TUNER	1	<!>
F1101		XBA2C16TB0	FUSE	1	<!>
	■	VEP06976J	MAIN C.B.A.		(RTL)
C301		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C302		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C303,04		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C305,06		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	2	
C308		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C309		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C310		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C311		ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C312		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C313		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C314		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C315		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C316		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C317		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C318		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C319		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C320		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C321		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C322		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C323		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C325		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C326		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C327		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C328		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C329		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C330		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C331		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
C332		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C333		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C334		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C336		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C337		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C338,39		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C340		ECUX1E223ZFV	C.CAPACITOR CH 25V 0.022U	1	
C341		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C342		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C360		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C361		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C362		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C363		ECUX1H392KBV	C.CAPACITOR CH 50V 3900P	1	
C364		ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C365		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C381		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C382,83		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0701-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0705		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUX1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUX1H300JPV	C.CAPACITOR CH 50V 30P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0722		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0724		ECQB1H393JF	P.CAPACITOR 50V 0.039U	1	
C0725		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0727		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0728		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0729		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0730		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C801-04		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C806		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C808		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C813		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C814		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C815		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C820		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C821,22		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	2	
C823,24		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C825		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C826-28		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C830,31		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C832		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C833		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C834		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C835		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C836		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C837		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C838		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C839		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C840		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C841		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C842		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C843		ECUX1E223ZFV	C.CAPACITOR CH 25V 0.022U	1	
C844		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C845		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C846		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C847		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C848		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C849		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C850		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C851		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C853		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C854		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C856		ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C857		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C858		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C859		ECEA1HKAR33	E.CAPACITOR 50V 0.33	1	
C860		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C861		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C862		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C868,69		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C881		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C882		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C883		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C884		ECQV1H563JM	P.CAPACITOR 50V 0.47U	1	
C885		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C886		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C887		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C888		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C893		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1005		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1007		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1008		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1009		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1010		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1013		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1101		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1104		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1106		ECQE6104KF	P.CAPACITOR	1	
C1107		ECKMWS102MEH	C.CAPACITOR	1	<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1110,11		ECQU2A104MNB	P.CAPACITOR 100V 0.1U	2	<!>
C1112		ECEC2GG330	E.CAPACITOR 400V 33U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KGE	C.CAPACITOR 1kV 47P	1	
C1115		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1116		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1120		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C1121		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C1131		EEUFA1E681	E.CAPACITOR 25V 680P	1	
C1132		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1133		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1134		EEUFA1A681B	E.CAPACITOR 10V 680P	1	
C1135		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1136		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1137		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1138		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1139		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1140		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1141		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1142		ECKD2H101KB	C.CAPACITOR 500V 100P	1	
C1143		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C1147		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C1149		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1150		ECA1CM101	E.CAPACITOR 16V 100U	1	
C1151		ECA1CM470	E.CAPACITOR 16V 47U	1	
C1153		ECQV1H684JL	P.CAPACITOR 50V 0.68U	1	
C2013		ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C2022		ECEA1EKS330	E.CAPACITOR 25V 33U	1	
C2023		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2024		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2025,26		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2029,30		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2047		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2049-51		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	3	
C2052		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2053-55		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	3	
C3001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3002,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3004		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3005		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3007		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3008		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3010		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3015		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3016		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECUM1H620JCN	E.CAPACITOR CH 50V 62P	1	
C3021		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3023		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3027		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3028		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3029		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3031		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3032		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3033		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3041		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C3042,43		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3045		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4008		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4017		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4044		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4045		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504		ECEA1CU470	E.CAPACITOR 16V 47U	1	
C4505		ECA1VM470	E.CAPACITOR 35V 47P	1	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4524		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4537		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUX1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4551		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4562		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594,95		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4616		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4621		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4636		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4638		ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C6001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6003		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C6006		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6007,08		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C6010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6011		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6013		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6015,16		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6029		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7302		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C7304,05		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	2	
C7308		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7309		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C7310		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7311		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7312		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C7313		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314,15		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	2	
C7320,21		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C7323,24		ECUM1H153KBM	C.CAPACITOR CH 50V 0.015U	2	
C7328		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7330		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7332,33		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	
C7337		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7339		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7340		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341		ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7345		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7346		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347		ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7349,50		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C7352		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7353		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7601,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7603		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7605		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7606		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7607		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7609		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7610,11		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7612		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7614		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7615		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7701		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C7702		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C7708-10		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C7712		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7714		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7722		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7726		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7729		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7730		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C7731		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7732		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7734		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7738		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7740,41		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C7742		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7747		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7753		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7756		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7758		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7761		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7762		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7763,64		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7765		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7766,67		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7768		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7769		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7771		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7773		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C7775		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7777		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
D301		MA141K	DIODE	1	
D381		MA141K	DIODE	1	
D382		MA143	DIODE	1	
D383		MA141K	DIODE	1	
D802		MA141K	DIODE	1	
D1004		MA4051-L	DIODE	1	
D1005		1SS355	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS355	DIODE	1	
D1102		ERA15-08	DIODE	1	<!>
D1103		AP01C	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D1104		MA178	DIODE	1	
D1105-07		ERA15-08	DIODE	3	<!>
D1108		RD100E	DIODE	1	
D1109,10		ERA15-08	DIODE	2	
D1111		MA4120-M	DIODE	1	
D1121		RL2Z	DIODE	1	
D1122		21DQ04FC4	DIODE	1	
D1123		ERA22-02V5	DIODE	1	
D1124		MA185	DIODE	1	
D1125		11EQS04	DIODE	1	
D1126		MA4047M	DIODE	1	
D1127		1SS355	DIODE	1	
D1129		MA4043-L	DIODE	1	
D1130		1SS254	DIODE	1	
D1132		1SS355	DIODE	1	
D2003-05		1SS254	DIODE	3	
D2007		MA151WA	DIODE	1	
D3001		1SS254	DIODE	1	
D3002		MA165VT	DIODE	1	
D3003		1SS355	DIODE	1	
D3010		MA151K	DIODE	1	
D3011		1SS355	DIODE	1	
D4003		1SS355	DIODE	1	
D4005		1SS254	DIODE	1	
D4501-04		MA141K	DIODE	4	
D6001		LN59L.VT	LED	1	
D6002,03		1SS254	DIODE	2	
D6007		MA4075-L	DIODE	1	
D7304		MA29T-B	DIODE	1	
D7305		1SS254	DIODE	1	
D7306		MA151WA	DIODE	1	
D7307		MA151K	DIODE	1	
D7601		MA4300M	DIODE	1	
D7605		1SS254	DIODE	1	
D7701		MA151WA	DIODE	1	
D7704		MA151K	DIODE	1	
DL802		EFDWLA13A	DELAY	1	
F1101		XBA2C16TH15	FUSE	1	<!>
FL881		VLF0143	FILTER	1	
IC301		MSM7403MS	IC	1	
IC302		TDA9715H/A	IC	1	
IC0701		LA7576	IC	1	
IC0702		LA7975	IC	1	
IC801		M52352FP	IC	1	
IC881		BA7025L	IC	1	
IC1001		HA17431PA	IC	1	
IC1101		TDA4605-3	IC	1	<!>
IC2001		XRA6887-V3	IC	1	
IC2004		LM358PS	IC	1	
IC4501		XLH7773AKS	IC	1	
IC4601		BA7755AF	IC	1	
IC6001		MN67434VRTA	IC	1	
IC6002,03		ON1387	PHOTO INTERRUPTER	2	
IC7301		TDA9845	IC	1	
IC7302		TA8721SN	IC	1	
IC7701		M27C512MFBA	IC	1	
IC7702		74HCT573D	IC	1	
IC7703		M52055FP	IC	1	
IC7704		ST24C08C	IC	1	
IC7706		P80C528FBP	IC	1	
IC7707		D74HC164G	IC	1	
IC7708		SAA5281PM3	IC	1	
IC7709		D74HC161G	IC	1	
K4		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K301		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K303		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0701		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0704,05		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
K801		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K851		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K853		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4002		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4004		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4023		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7302		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7304		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7601		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7604		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7701		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7705		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7709		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7714		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7717,18		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L301		ELESE330KA	COIL 33UH	1	
L302,03		ELESE390KA	COIL 39UH	2	
L304		ELESE101KA	COIL 100UH	1	
L306		ELESE121KA	COIL 120UH	1	
L307		ELESE101KA	COIL 100UH	1	
L308		ELESE390JA	COIL 39UH	1	
L0701		VLQ0163JR22	COIL H	1	
L0705		VLQ0163K3R3	COIL H	1	
L0706		VLQEL05T5R6K	COIL H	1	
L802		ELESE101KA	COIL 100UH	1	
L803		ELESE270KA	COIL 27UH	1	
L805,06		ELESE150KA	COIL	2	
L807		ELESE101KA	COIL 100UH	1	
L808		ELESE6R8JA	COIL 6.8UH	1	
L809-11		ELESE101KA	COIL 100UH	3	
L812		VLP0125	INDUCTOR	1	
L881		ELESE101KA	COIL 100UH	1	
L1107,08		ELF18D222F	COIL H	2	<!>
L1109		VLP0074	INDUCTOR	1	
L1110		VLP0085	INDUCTOR	1	
L1112		VLP0125	INDUCTOR	1	
L1121		VLQ0611K220	COIL 22UH	1	
L1122		ELELN220KA	COIL 22UH	1	
L1123,24		ELESE101KA	COIL 100UH	2	
L3001		VLQ0599J3R3	COIL 3.3UH	1	
L3002		VLQ0599J680	COIL 68UH	1	
L3003		VLQ0599J6R8	COIL 6.8UH	1	
L3004		VLQ0599J120	COIL 120UH	1	
L3006		VLQ0599J101	COIL 100UH	1	
L3007		VLQ0599J680	COIL 68UH	1	
L3008		VLQ0599J270	COIL 27UH	1	
L3009		VLQ0599J680	COIL 68UH	1	
L3011		VLP0074	INDUCTOR	1	
L4501,02		ELESE101KA	COIL 100UH	2	
L4601		VLQEL07R153J	COIL H	1	
L7601,02		VLQ0599J1R0	COIL 1UH	2	
L7603-05		VLQ0599J680	COIL 68UH	3	
L7607,08		VLQ0599J680	COIL 68UH	2	
L7702		ELESE3R3KA	COIL 3.3UH	1	
L7704		ELESE100KA	COIL 10UH	1	
L7705,06		ELESE101KA	COIL 100UH	2	
L7708		ELESE270KA	COIL 27UH	1	
P1101		VJS3306	AC INLET	1	<!>
P2001		VJS3316A002	CONNECTOR (FEMALE) 2P	1	
P3002		VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P6001		VJS3537A032G	CONNECTOR (FEMALE) 32P	1	
P6004		VJS3317A004	CONNECTOR (FEMALE) 4P	1	
PK0701		VJR0816E010W	CONNECTOR 10P	1	
PK881		VJR0456	PACK PIN	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PK4001-03		VJR0757B018T	CONNECTOR 18P	3	
PK7301		VJR0777B007W	CONNECTOR 7P	1	
PK7302		VJR0777B005W	CONNECTOR 5P	1	
PP0701		VJP3589E004B	CONNECTOR (MALE) 4P	1	
PP2001		VJP3042A017W	CONNECTOR (MALE) 17P	1	
PP2002		VJP3042A011W	CONNECTOR (MALE) 11P	1	
PP3901		VJP3042A015W	CONNECTOR (MALE) 15P	1	
PP3902		VJP3042A018W	CONNECTOR (MALE) 18P	1	
PP6005		VJP3042A003W	CONNECTOR (MALE) 3P	1	
PP7701		VJP3043A010W	CONNECTOR (MALE) 10P	1	
PP7702		VJP3043A009W	CONNECTOR (MALE) 9P	1	
PS301		VJR0776B008W	CONNECTOR 8P	1	
PS302		VJR0776B013W	CONNECTOR 13P	1	
PS303		VJR0776B006W	CONNECTOR 6P	1	
PS7701		VJS3043B009W	CONNECTOR (FEMALE) 9P	1	
PS7702		VJS3043B010W	CONNECTOR (FEMALE) 10P	1	
Q301		2SC3930	TRANSISTOR	1	
Q360		2SD1819A	TRANSISTOR	1	
Q361		2SB1218A	TRANSISTOR	1	
Q362		2SB1218A-R	TRANSISTOR	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q0702		MSB709	TRANSISTOR	1	
Q804		2SC3930	TRANSISTOR	1	
Q1001		2SD601A	TRANSISTOR	1	
Q1002-04		2SD1996-S	TRANSISTOR	3	
Q1005		2SD602A	TRANSISTOR	1	
Q1006		MSD602	TRANSISTOR	1	
Q1101		STP3N60FI-M	TRANSISTOR	1	<!>
Q1102		2SD601A	TRANSISTOR	1	
Q1104		2SB1321A	TRANSISTOR	1	
Q1105		2SD601A	TRANSISTOR	1	
Q1106		2SD2544OPQA	TRANSISTOR	1	
Q1107		MOC8104FR2	TRANSISTOR	1	<!>
Q1111		MOC8104FR2	TRANSISTOR	1	<!>
Q3001		XN4501	TRANSISTOR-RESISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q3003		2SB709A	TRANSISTOR	1	
Q3004		MSD601	TRANSISTOR	1	
Q3005		MSC2295	TRANSISTOR	1	
Q3006		MSB709	TRANSISTOR	1	
Q3007		MSC2295	TRANSISTOR	1	
Q3010		MSB709	TRANSISTOR	1	
Q4002		2SD601A	TRANSISTOR	1	
Q4501		2SD1991A-R	TRANSISTOR	1	
Q4551		2SB1320A-R	TRANSISTOR	1	
Q4552		2SD1819A	TRANSISTOR	1	
Q6001		MSB709	TRANSISTOR	1	
Q6002		PN205L-NC.VT	PHOTO TRANSISTOR	1	
Q7601		2SB709A-R	TRANSISTOR	1	
Q7701-04		MSB709	TRANSISTOR	4	
Q7705		MSD601	TRANSISTOR	1	
Q7711		MSD601	TRANSISTOR	1	
Q7717		MSD601	TRANSISTOR	1	
Q7720		MSD601	TRANSISTOR	1	
Q7722		MSD601	TRANSISTOR	1	
Q7723		MSB709	TRANSISTOR	1	
QR360		UN511E	TRANSISTOR-RESISTOR	1	
QR361		UN5213	TRANSISTOR-RESISTOR	1	
QR0701		MRN1404	TRANSISTOR-RESISTOR	1	
QR801		UN5213 '	TRANSISTOR-RESISTOR	1	
QR804		UN5113	TRANSISTOR-RESISTOR	1	
QR806		UN5113	TRANSISTOR-RESISTOR	1	
QR807		UN5213	TRANSISTOR-RESISTOR	1	
QR808		UN5212	TRANSISTOR-RESISTOR	1	
QR1001,02		MUN2113	TRANSISTOR-RESISTOR	2	
QR1101		UN2114	TRANSISTOR-RESISTOR	1	
QR1102,03		MUN2213	TRANSISTOR-RESISTOR	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR1104		MUN2212	TRANSISTOR-RESISTOR	1	
QR1105,06		MUN2213	TRANSISTOR-RESISTOR	2	
QR2001		MUN2113	TRANSISTOR-RESISTOR	1	
QR2002		UN2114	TRANSISTOR-RESISTOR	1	
QR2003		FMG8	TRANSISTOR-RESISTOR	1	
QR2004		MUN2112	TRANSISTOR-RESISTOR	1	
QR2006,07		IMD8	TRANSISTOR-RESISTOR	2	
QR2008,09		MUN2213	TRANSISTOR-RESISTOR	2	
QR2014		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3002,03		DTC363EK	TRANSISTOR-RESISTOR	2	
QR3005		MUN2213	TRANSISTOR-RESISTOR	1	
QR3006		XN4213	TRANSISTOR-RESISTOR	1	
QR3007		MUN2211	TRANSISTOR-RESISTOR	1	
QR3008		MUN2213	TRANSISTOR-RESISTOR	1	
QR4001		MUN2212	TRANSISTOR-RESISTOR	1	
QR4002,03		MUN2213	TRANSISTOR-RESISTOR	2	
QR4508,09		UN5113	TRANSISTOR-RESISTOR	2	
QR4510		UN5212	TRANSISTOR-RESISTOR	1	
QR6001		XN1211	TRANSISTOR-RESISTOR	1	
QR6003		MUN2211	TRANSISTOR-RESISTOR	1	
QR7303		XN4213	TRANSISTOR-RESISTOR	1	
QR7304		MUN2213	TRANSISTOR-RESISTOR	1	
QR7307		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
QR7707		UN2216	TRANSISTOR-RESISTOR	1	
QR7710		UN2216	TRANSISTOR-RESISTOR	1	
QR7716		UN2215	TRANSISTOR-RESISTOR	1	
QR7719		MUN2113	TRANSISTOR-RESISTOR	1	
R305,06		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R307		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R308,09		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R310		ERJ6GEYK125	M.RESISTOR CH 1/10W 1.2M	1	
R311		ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R312		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R319		ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R320		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R321		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R322		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R325		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R328		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R329		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R331,32		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R333		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R334,35		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	2	
R337		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R338		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R360		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R361		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R362,63		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R364,65		ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	2	
R367		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R369		ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R370		ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R371		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R372		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R373		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R383		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R392		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R393		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R394		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0703		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VRE0040E151	M.RESISTOR CH 1/10W 150	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0723		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R0724		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0725		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R0726		ERJ3GEYG122	M.RESISTOR CH 1/16W 1.2K	1	
R0727		ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R0728		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0729		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0730		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0731		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0782		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R801		ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R802		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R804		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R805		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R809		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R811		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R819,20		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
R821		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R822		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R823		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R824,25		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	2	
R826		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R827,28		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R829		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R830		ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R831		ERJ3GEYJ204	M.RESISTOR CH 1/16W 200K	1	
R832		ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R833		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R834		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R835		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R836		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R837		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R838		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R839		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R840		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R841		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R843		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R853		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R855		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R856		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R861		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R862		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R863		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R880		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R881		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R882		ERJ6GMYJ390	M.RESISTOR CH 1/10W 39	1	
R883		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R884		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R885		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R886		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1002		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1003		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1004		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R1005		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1006		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1007		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1008		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1009,10		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R1102,03		ERDS1TJ183	C.RESISTOR 1/2W 18K	2	
R1104		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1107		ERJ6GMYJ164	M.RESISTOR CH 1/10W 160K	1	
R1108		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R1109		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R1110		ERJ6GMYJ362	M.RESISTOR CH 1/10W 3.6K	1	
R1111		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1112		ERJ8GEYJ304	M.RESISTOR CH 1/8W 300K	1	
R1113		ERJ8GEYJ434	M.RESISTOR CH 1/8W 430K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1114		ERX12SJR51	M.RESISTOR 1/2W 0.51	1	
R1115		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1116		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R1117		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1118		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1119		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1120		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1122		ERC12AGM334	S.RESISTOR 1/2W 330K	1	<!>
R1125		ERJ6GMYJ220	M.RESISTOR CH 1/10W 22	1	
R1126		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1127		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1128		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1129		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R1130		ERDS1TJ472	C.RESISTOR 1/2W 4.7K	1	
R1134		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1135		ERJ8GEYJ274	M.RESISTOR CH 1/8W 270K	1	
R1136		ERJ8GEYJ394	M.RESISTOR CH 1/8W 390K	1	
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERDS2FJ7R5	C.RESISTOR 1/4W 7.5	1	
R2004		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2005,06		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2007		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2012		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2013-15		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	3	
R2017,18		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R2019		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2021		ERJ6GMYJ104	M.RESISTOR CH 1/10W 1M	1	
R2023		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2025		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2027,28		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029,30		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R2035		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2037		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2040		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2041		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2045		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2046		ERJ6GMYG124	M.RESISTOR CH 1/10W 120K	1	
R2047		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R2048		ERJ6GMYG114	M.RESISTOR CH 1/10W 110K	1	
R2049		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2050		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2051		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2052		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2053,54		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R2059		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2060,61		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2062		ERDS2FJ7R5	C.RESISTOR 1/4W 7.5	1	
R2063,64		ERDS2FJ6R8	C.RESISTOR 1/4W 6.8	2	
R2065		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2066		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3001,02		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R3003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3004		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3007		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008,09		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3011		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R3012		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3013		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R3014		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
R3018		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3019,20		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R3021		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3022		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3023,24		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	2	
R3025		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3026		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3028		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3033		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3034		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3035		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3036		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3037		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3038,39		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R3041		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3042		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R3043		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3044		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R4001		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4006		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4008		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4014		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4018		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4043		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4046		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4055		ERG2SJ821	M.RESISTOR 2W 820	1	
R4058		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4059,60		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	2	
R4061		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4062		ERG2SJ101	M.RESISTOR 2W 100	1	
R4063		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R4501,02		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4503		ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
R4504,05		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4506,07		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509		VRE0071E622	M.RESISTOR CH 1/10W 6.2K	1	
R4511		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512		VRE0071E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4518,19		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4522		ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R4527		VRE0071E333	M.RESISTOR 33K	1	
R4528		VRE0071E153	M.RESISTOR 15K	1	
R4529		ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4542		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553,54		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562		VRE0034E10C	M.RESISTOR CH 1/10W	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568,69		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4573		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0071E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4585,86		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4593		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4596		ERJ3GEYG473	M.RESISTOR CH 1/16W 47K	1	
R4597		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4598,99		ERJ3GEYG104	M.RESISTOR CH 1/16W 100K	2	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		VRE0071E562	M.RESISTOR 5.6K	1	
R4610		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4611		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4612		VRE0071E331	M.RESISTOR CH 1/10W 330	1	
R4613		ERJ3GEYG394	M.RESISTOR CH 1/16W 390K	1	
R4615		VRE0071E133	M.RESISTOR CH 1/10W 13K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4616		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4649		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R4653		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R4656		ERJ3GEYG243	M.RESISTOR CH 1/16W 24K	1	
R4657		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4666		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4670		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R4671		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R6001		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R6002		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R6003		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6004		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6005-07		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6008		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6009-11		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6013		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R6014,15		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6016		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6017		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6018		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6020		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6022		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6023		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6024-29		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	6	
R6030		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6031		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6032,33		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6034,35		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6037		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R6039,40		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6042		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7302		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7303		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7304		ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R7305		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7307		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7311		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R7313		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R7314		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R7320,21		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7323		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7324,25		ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R7326		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7336		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7337		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7345		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7352,53		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7354,55		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7356		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7357		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7358,59		ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R7362,63		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7601		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7602,03		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7604		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7605-07		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R7608		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R7609		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7610		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7611		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R7612		ERG1SJ681	M.RESISTOR 1W 680	1	
R7614		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7701		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7705		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	1	
R7706		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7707		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R7708		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7709,10		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	2	
R7711		ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	1	
R7712		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7713		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7723		ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R7725		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7727		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R7729		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	1	
R7730		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R7734		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7736		ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R7737,38		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R7746		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7750		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7751		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7754		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R7755		ERJ6GEYJ243	M.RESISTOR CH 1/10W 24K	1	
R7756		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7757		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7758		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7759		ERJ6GEYJ362	M.RESISTOR CH 1/10W 3.6K	1	
R7761		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7762		ERJ6GEYJ202	M.RESISTOR CH 1/10W 2K	1	
R7763		ERJ6GEYJ302	M.RESISTOR CH 1/10W 3K	1	
R7764		ERJ6GEYJ752	M.RESISTOR CH 1/10W 7.5K	1	
R7765		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7766		ERJ6GEYJ202	M.RESISTOR CH 1/10W 2K	1	
R7768,69		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R7770		ERJ6GMZ0RC0	M.RESISTOR CH 1/10W 0	1	
R7772		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	1	
R7774		EXBF9E103J	COMBI.R-R 10K	1	
R7779		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7781-83		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R7784,85		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7787-89		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	3	
R7790		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R7791		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7794		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	1	
R7795		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7796		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7797		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7798		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7799		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC073A	TRANSFORMER	1	
T0711		EQS5EC032A	TRANSFORMER	1	
T881		ELM7Q207A	COIL	1	
T1101		VLT0740	TRANSFORMER	1	<!>
T7301		EQR7QG028P	TRANSFORMER	1	
T7304		EIS5EC017A	TRANSFORMER	1	
T7305		EQS5EC033A	TRANSFORMER	1	
VR301		EVMEASA00B13	V.RESISTOR	1	
VR302		EVMEASA00B14	V.RESISTOR	1	
VR303,04		EVMEASA00B53	V.RESISTOR	2	
VR305,06		EVMEASA00B14	V.RESISTOR	2	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
VR801		EVNCYAA03B14	V.RESISTOR	1	
VR2001		EVNCYAA03B54	V.RESISTOR	1	
VR3001,02		EVNCYAA03B23	V.RESISTOR	2	
VR3012,13		EVNCYAA03B52	V.RESISTOR	2	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00BY4	V.RESISTOR	1	
VR4507		EVMEASA00BY4	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00B14	V.RESISTOR	1	
VR4551,52		EVMEASA00B55	V.RESISTOR	2	
VR7301,02		EVNCBAA00B53	V.RESISTOR	2	
X0702		EFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X0703		EFCS3F02W3B	CRYSTAL OSCILLATOR	1	
X0704		EFCH38MGP33	CRYSTAL OSCILLATOR	1	
X0721		EFOA512KT4BE	CRYSTAL OSCILLATOR	1	
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0609	CRYSTAL OSCILLATOR	1	
X7301		EFCT5R5MS5	CRYSTAL OSCILLATOR	1	
X7304		EFCT5R74MS5B	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X7305		VSX0648	CRYSTAL OSCILLATOR	1	
X7701		VSX0583	CRYSTAL OSCILLATOR	1	
X7702		VSX0353	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VMD2029	REEL GUIDE	1	
		VMZ2212	CAPACITOR COVER	3	<!>
		VSC4141	SW SHIELD COVER	1	
		VWJ0875	FLAT CARD CABLE	1	(P3002-P501)
		VWJ32C9160BB	FLAT CARD CABLE	1	(P6001-P7501)
		VMX2402	WASHER	1	
		EYF52BC	FUSE HOLDER	2	<!>
		ENG47226G	TUNER	1	<!>
		VMD1926	SENSOR LED HOLDER	1	FOR D6001
		VMD1927	PHOTO TR. HOLDER	1	FOR Q6002
		VMZ2373	BARRIER	1	FOR OSD PACK C.B.A.
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A
	■	VEP03C03B	INPUT/OUTPUT PACK C.B.A.		(RTL)
C3901		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3902,03		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3904		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3905,06		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C4901-06		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	6	
C4907		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4908		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
D3901		1SS254	DIODE	1	
D3903		1SS254	DIODE	1	
D3904		MA4056M	DIODE	1	
D3905		1SS254	DIODE	1	
IC3901		MM1111XFF	IC	1	
IC4901		NJM4558M	IC	1	
JK3901		VJS1469	21PIN SKIRT JACK	1	
JK3902		VEJ1488	I/O JACK PLATE	1	
K3901		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L3901,02		VLQ0188J101	COIL 100UH	2	
PS3901		VJS3042F015W	CONNECTOR (FEMALE) 15P	1	
PS3902		VJS3042B018W	CONNECTOR (FEMALE) 18P	1	
Q4901,02		2SD1328	TRANSISTOR	2	
QR3901		MUN2212	TRANSISTOR-RESISTOR	1	
QR3902		MUN2111	TRANSISTOR-RESISTOR	1	
QR3903		MUN2213	TRANSISTOR-RESISTOR	1	
QR4901,02		MUN2113	TRANSISTOR-RESISTOR	2	
R3901,02		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3903		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3904		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3905		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3906		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4901-04		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	4	
R4905		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4906,07		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4908		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4909,10		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4911,12		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R4913,14		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
S3901,02		ESD172311	SWITCH	2	
			MISCELLANEOUS		
		XTV3+8GFZ	SCREW	2	FOR 21PIN SKIRT JACK
	■	VEP04469F	MOTOR DRIVE C.B.A.		(RTL)
C2501,02		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C2503		ECA1EM470	E.CAPACITOR 25V 47U	1	
C2504		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2505		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2506		ECA1EM470	E.CAPACITOR 25V 47U	1	
C2507,08		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	2	
C2509		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2510		ECAOJM221	E.CAPACITOR 6.3V 220U	1	
C2511		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	1	
C2512		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2513		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2514-16		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	3	
C2517		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2518		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C2519		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2520		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C2521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2523		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2525		ECEAOJKA470	E.CAPACITOR 6.3V 47U	1	
C2540		ECEA1HKAR47	E.CAPACITOR 50V 0.47	1	
C2541		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4712		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4713		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4714		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4715		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4716		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4732		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C4744		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
D2501,02		MA185	DIODE	2	
D2504,05		MA700	DIODE	2	
D2506		1SS355	DIODE	1	
D4702		MA151K	DIODE	1	
IC2501		BA6871S	IC	1	
K4708		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
K4710		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
L2502		VLP0074	INDUCTOR	1	
L4702		ELESE471KA	COIL	1	
L4705,06		VLP0150	INDUCTOR	2	
P2003		VJP3502	CONNECTOR (MALE)	1	
P2501		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2502		VJP1232T	CONNECTOR (MALE) 5P	1	
P4002		VJS2329	CONNECTOR (FEMALE)	1	
P4003		VJP1230T	CONNECTOR (MALE) 3P	1	
PS2501		VJS3042B017W	CONNECTOR (FEMALE) 17P	1	
PS4701		VJS3042B011W	CONNECTOR (FEMALE) 11P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q4701		2SD602A-R	TRANSISTOR	1	
Q4703		2SB1320A-R	TRANSISTOR	1	
QR4703		MUN2214	TRANSISTOR-RESISTOR	1	
R2501		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2502		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2503,04		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2505		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2506		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2507		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2508		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2509		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2510		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2511		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2512		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513,14		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2515		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2516		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2517		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2518		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2519		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2520		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2521,22		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2529		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R2530		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2531		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2532		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R2533		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2534		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4710		ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R4715		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4723		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4735		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
T4701		EIQ7QF014Q	TRANSFOMMER	1	
VR2006		EVNDCAA03B15	V.RESISTOR	1	
VR2011		EVNDCAA03B15	V.RESISTOR	1	
VR4001		EVNDCAA03B15	V.RESISTOR	1	
			MISCELLANEOUS		
		VEE9091	WIRE CABLE	1	(P2003-POWER TR.)
		VEE9112	WIRE CABLE	1	(P4003-FE HEAD)
		VWJ0868	FLAT CARD CABLE	1	(P2501-CAPSTAN)
		VEE9144	WIRE CABLE	1	(P2502-CYLINDER)
	■	VEP05204A	HEAD AMP C.B.A.		(RTL)
C501		ECEAOJKA221	E.CAPACITOR 6.3V 220U	1	
C502,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C504		ECEAOJKA221	E.CAPACITOR 6.3V 220U	1	
C505		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C506		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C507		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C508,09		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C510,11		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C512,13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C514,15		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C516-18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C519		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C521		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C523		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C524		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C526		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C527		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C528		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C529		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C530		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C532		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C541		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C542		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C551		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C552		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C553		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C554-57		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C558		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C559		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C560		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C561		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C562		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
D501		1SS254	DIODE	1	
D502,03		MA151WA	DIODE	2	
D551		MA151WA	DIODE	1	
D552		1SS254	DIODE	1	
IC501		AN3360SB	IC	1	
L501,02		ELEXH680JBV	COIL 68UH	2	
L505		ELEXH121JBV	COIL 120UH	1	
L506		ELEXH151JBV	COIL 150UH	1	
L507		ELEXH680JBV	COIL 68UH	1	
L551,52		ELEXH680JBV	COIL 68UH	2	
P501		VJS3537B020G	CONNECTOR (FEMALE) 20P	1	
P502		VJS2603	CONNECTOR (FEMALE)	1	
Q503		MSD601	TRANSISTOR	1	
QR501		MUN2213	TRANSISTOR-RESISTOR	1	
QR502		UN2221	TRANSISTOR-RESISTOR	1	
QR551		MUN2213	TRANSISTOR-RESISTOR	1	
R501		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R503		VRE0034E102	M.RESISTOR CH 1/10W 1K	1	
R504		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R505		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R506		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R507		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R508-11		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	4	
R512,13		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R514		ERJ6GMYJ242	M.RESISTOR CH 1/10W 2.4K	1	
R515		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R516		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R517		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R518,19		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R526,27		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R528		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R529		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R530		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R532		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R533		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R549		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R551		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R552		VRE0034E160	M.RESISTOR CH 1/10W 16K	1	
R553,54		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R555		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R556		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
			MISCELLANEOUS		
		VSC3478	SHIELD COVER (MAIN)	1	
		VSC3714	SHIELD COVER (TOP)	1	
		VSC3715	SHIELD COVER (BOTTOM)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP07817D	TIMER C.B.A.		(RTL)
C7501		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7502		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504,05		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7506		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C7507		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7509		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7510		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7511		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7512		ECRHA010A54R	V.CAPACITOR	1	
C7513		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7514		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7515		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7516		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C7517		VCE0073	E.CAPACITOR	1	
C7518-21		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C7523-25		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C7526		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
D7501,02		MA73	DIODE	2	
D7503,04		1SS254	DIODE	2	
D7505		MA73	DIODE	1	
D7506-08		1SS254	DIODE	3	
D7509		LN81RCPH	LED	1	
D7515		1SS254	DIODE	1	
D7518		1SS254	DIODE	1	
D7528		1SS254	DIODE	1	
D7531		1SS254	DIODE	1	
D7532		MA4220	DIODE	1	
D7533		1SS254	DIODE	1	
D7540		1SS254	DIODE	1	
D7541		HLMK-D315	DIODE	1	
D7542		1SS254	DIODE	1	
D7546		1SS254	DIODE	1	
DP7501		VSL0325	DISPLAY TUBE	1	
IC7501		M37507V4CG	IC	1	
IC7503		RPM675CBRX10	IR RECEIVER UNIT	1	
IC7504		PST7023	IC	1	
IC7505		S80743AL	IC	1	
K7502,03		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	2	
K7509		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
K7514		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
P7501		VJS3537B032G	CONNECTOR (FEMALE) 32P	1	
Q7501		2SD1991A	TRANSISTOR	1	
QR7501		MUN2112	TRANSISTOR-RESISTOR	1	
QR7503		MUN2211	TRANSISTOR-RESISTOR	1	
QR7504		MUN2111	TRANSISTOR-RESISTOR	1	
R7501-03		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7505		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7506-10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	5	
R7512		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7514		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7515		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7516		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7518		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7519		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7520		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7521		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7522		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7534,35		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7536		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R7537		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7539		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7540		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R7542		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7544		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7546		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7549		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R7551,52		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7553		ERJ6GEYJ180	M.RESISTOR CH 1/10W 18	1	
R7554		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7556		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7557		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7558		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
SW7502-04		EVQ11409K	SWITCH	3	
SW7506-10		EVQ11409K	SWITCH	5	
SW7512-15		EVQ11409K	SWITCH	4	
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF1122	FIP HOLDER	1	
		VMD1047	LED SPACER	2	
		VMD2247	IR RECEIVER HOLDER	1	
	■	VEP00U88A	MAIN INTERFACE C.B.A.		(RTL)
PS1501		VJS3042B003W	CONNECTOR (FEMALE) 3P	1	
PS6005		VJS3042B003W	CONNECTOR (FEMALE) 3P	1	
	■	VEP00U71A	S-TAB C.B.A.		(RTL)
PP1501		VJP3042A003W	CONNECTOR (MALE) 3P	1	
Q1501		PN205L-NC.VT	PHOTO TRANSISTOR	1	
SW1501		VES0695	SAFETY SWICTH	1	
			MISCELLANEOUS		
		VMD1927	PHOTO TR. HOLDER	1	
	■	----------	MOTOR C.B.A.		
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (FEMALE) 2P	1	
	■	VEX0129	CYLINDER DRIVE C.B.A.		(RTL)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2901-03		ECEA1VSN2R2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2910		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
IC2901		AN3814K	IC	1	
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR (MALE) 5P	1	
R2901		ERX12SJR68	M.RESISTOR CH 1/2W 0.68	1	
			MISCELLANEOUS		
		VMA9138	MAIN HOLDER	1	