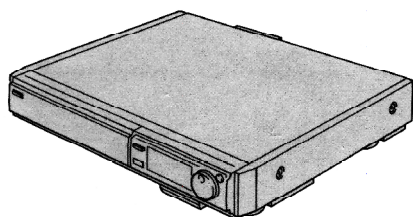
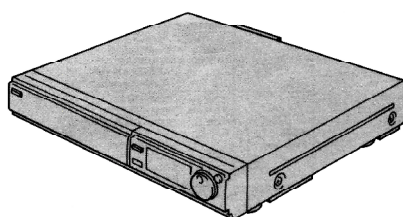


# Service Manual

Video Cassette Recorder



NV-FS200EG

**Panasonic** **S** **VHS** VHS  
PAL  
625
**Hi-Fi HQ**
**NV-FS200EG**
**NV-FS88EG**


NV-FS88EG

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Servo pack schematic diagram \ принципиальная схема сервопривода (дополнительная)

Luminance \ chrominance pack schematic diagram \ принципиальная схема каналов яркости \ цветности (дополнительная)

Sub luminance \ chrominance pack schematic diagram \ принципиальная схема блока каналов яркости \ цветности (дополнительная)

HI-FI audio pack schematic diagram \ принципиальная схема модуля блока HI-FI

Input \ output pack schematic diagram \ принципиальная схема платы ввода \ вывода

TBC schematic diagram (NV-FS200EG) \ принципиальная схема корректора временной базы (NV-FS200EG)

Head AMP schematic diagram \ принципиальная схема усилителя видеоголовок

VPS pack schematic diagram \ принципиальная схема блока ВПС

Timer &amp; VR schematic diagram \ принципиальная схема платы управления и таймера

TV demodulator pack schematic diagram \ принципиальная схема блока ТВ демодулятора

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**EXPLODED VIEWS & PARTS LIST \ СБОРОЧНЫЕ ЧЕРТЕЖИ И СПИСОК ЗАПАСНЫХ ЧАСТЕЙ**

Exploded views and mechanical replacement parts list \ сборочные чертежи и список механических запасных частей

Chassis parts section (1) \ секция шасси (1)

Chassis parts section (2) \ секция шасси (2)

Cassette up mechanism section \ секция механизма кассетоприемника

Packing parts section \ упаковка

Casing parts section \ корпус

Electrical replacement parts list \ список электрических запасных частей

**Panasonic**

## SPECIFICATIONS

ITEM	SPECIFICATION		ITEM	SPECIFICATION
POWER	SOURCE: 220 ~ 240 V 50/60Hz		VIDEO	OUTPUT: EURO AV (AV1/AV2) Connectors (21 pin) 1.0Vp-p, 75Ω terminated S-VIDEO OUT Connector (S4 pin) Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, 75Ω unbalanced
	CONSUMPTION: 41 watts (NV-FS200EG) 39 watts (NV-FS88EG)			
RECORDING SYSTEM	2 rotary heads, helical scanning system PAL		AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
TV TUNER SYSTEM	Germany	VHF I: CHE2 ~ CHE4 VHF III: CHS4 ~ CHE12 VHF H: CHS11 ~ CHS20 (PAL/SECAM B) 75Ω unbalanced UHF: CH21 ~ CH69 (PAL/SECAM G) 75Ω unbalanced		INPUT: EURO AV (AV1/AV2) Connectors (21 pin) More than -6dBV (500mV), more than 10kΩ AUDIO IN (AV3/AV4: NV-FS200EG) Connectors (Phono type) More than -10dBV (316 mV), more than 47kΩ MICROPHONE JACK -70dBV
	Italy	VHF I: CHA ~ CHH VHF III: CHS4 ~ CHH2 VHF H: CHS11 ~ CHS41 (PAL/SECAM B) 75Ω unbalanced UHF: CH21 ~ CH69 (PAL/SECAM G) 75Ω unbalanced		OUTPUT: EURO AV (AV1/AV2) Connectors (21 pin) -6dBV (500mV), Less than 1kΩ AUDIO OUT Connector (Phono type) -8dBV (400mV), Less than 1kΩ HEAD PHONE Jack -30dBV, 8Ω
	Other Countries	VHF I: CHE2 ~ CHS3 VHF III: CHM1 ~ CHE12 VHF H: CHU1 ~ CHS41 (PAL/SECAM B) 75Ω unbalanced UHF: CH21 ~ CH69 (PAL/SECAM G) 75Ω unbalanced		TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
RF OUT SYSTEM	UHF: CH36 ± 4 (PAL/SECAM G) 73 <sup>+2</sup> / <sub>-3</sub> dBμ, 75Ω terminated		TAPE FORMAT	S-VHS, VHS Cassette tape (Tape width 12.7 mm)
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L'-R' heads), 1 flying erase head		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
	INPUT: EURO AV (AV1/AV2) Connectors (21 pin) 1.0Vp-p, 75Ω terminated S-VIDEO IN (AV3/AV4: NV-FS200EG) Connectors (S4 pin) Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, 75Ω unbalanced VIDEO IN (AV4: NV-FS200EG) Connector (Phono type) 1.0Vp-p, 75Ω terminated		DIMENSIONS	460(W) × 109(H) × 403(D) mm (NV-FS200EG) 430(W) × 109(H) × 403(D) mm (NV-FS88EG)
			WEIGHT	8.0 kg (NV-FS200EG) 7.5 kg (NV-FS88EG)
			STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Contoroller 1 pc. Audio Cables 1 pc. Digital Scanner (NV-FS200EG) 1 pc. Programme Sheet 1 pc. AC Mains Lead 1 pc. 4P Cable

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

### 1-4. SERVICING THE LUMINANCE & CHROMINANCE PACK C.B.A. AND THE SUB LUMINANCE & CHROMINANCE PACK C.B.A.

When servicing the luminance/chrominance pack C.B.A. and Sub luminance/chrominance pack C.B.A., connections of extension cables are necessary as shown below.

PART NO.	PART NAME	PCS	CONNECTION
VFK0807	9 P EXTENSION CABLE	1	PS3001-PP3001
VFK0808	12 P EXTENSION CABLE	2	PS3002-PP3002, PS3003-PP3003
VFK0678	18 P EXTENSION CABLE	2	PS3011-PP3011, PS3012-PP3012

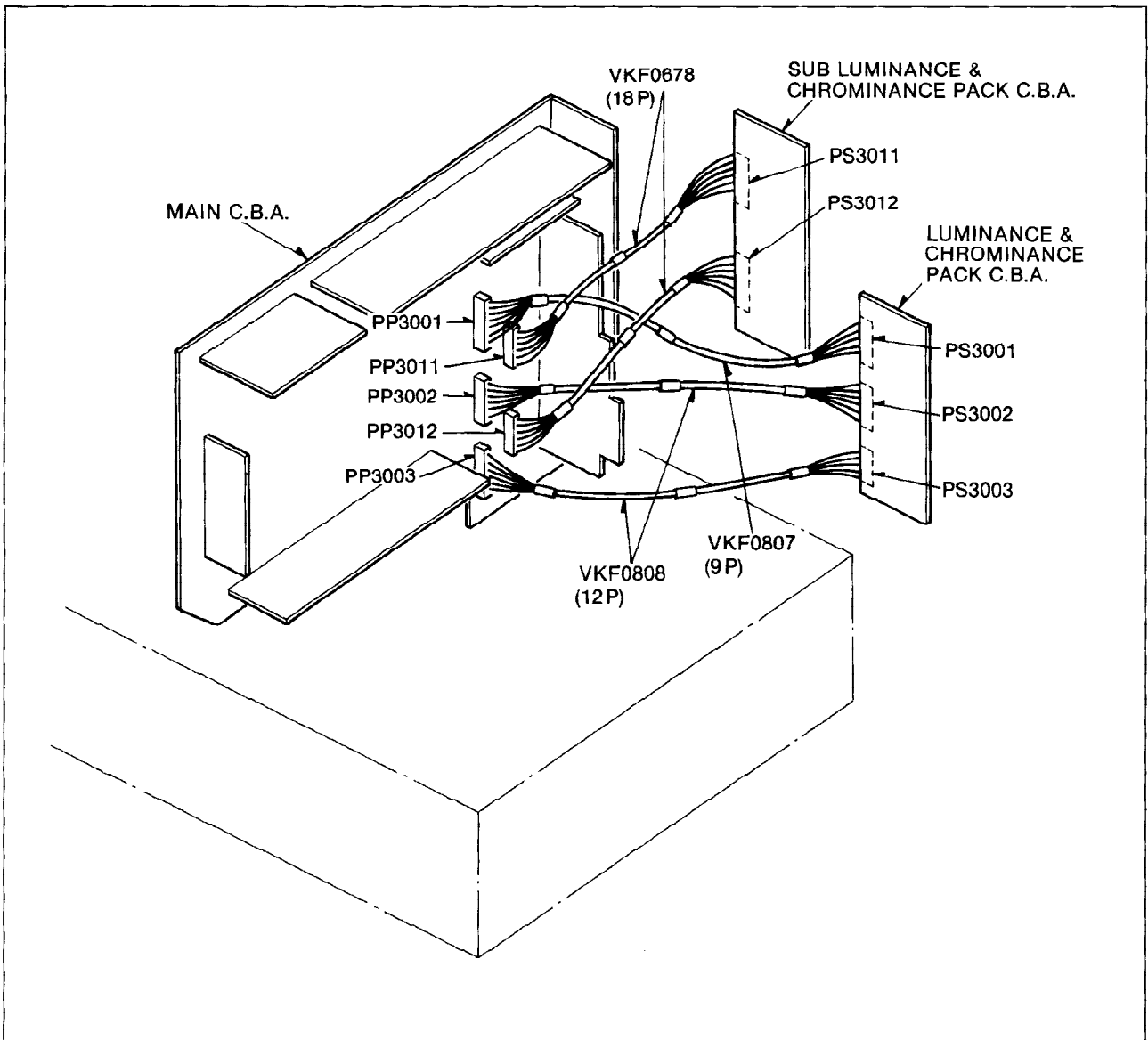


Fig. S1

# SECTION 1

## GENERAL DESCRIPTIONS

### 1-1. TECHNICAL INFORMATION

#### INITIALIZATION OF CHANNEL MEMORY IC (IC7503/M6M80021P)

When replace the channel memory IC (IC7503/  
M6M80021P), the memory IC should be initialized to  
keep formal specification.

#### Note:

- 1) It should be performed before tuner preset.
- 2) During initialization or after initialization within 1 second, do not stop the power source. (Do not disconnect AC cord)
- 3) Meaning of "INITIALIZATION" is to erase the "SKIP CH". In another to say the number of POSITION CH and DISPLAY CH to be same.

#### Method:

- 1) Press the CH UP/DOWN Button so that the Channel indicator "\_\_\_".
- 2) Connect the Diode (MA165) to Pin 54 of IC7501 for Anode, Pin 35 of IC7501 for Cathode twice.
- 3) Channel indication disappears, and approximately 3 seconds later Channel indicator indicates "1".

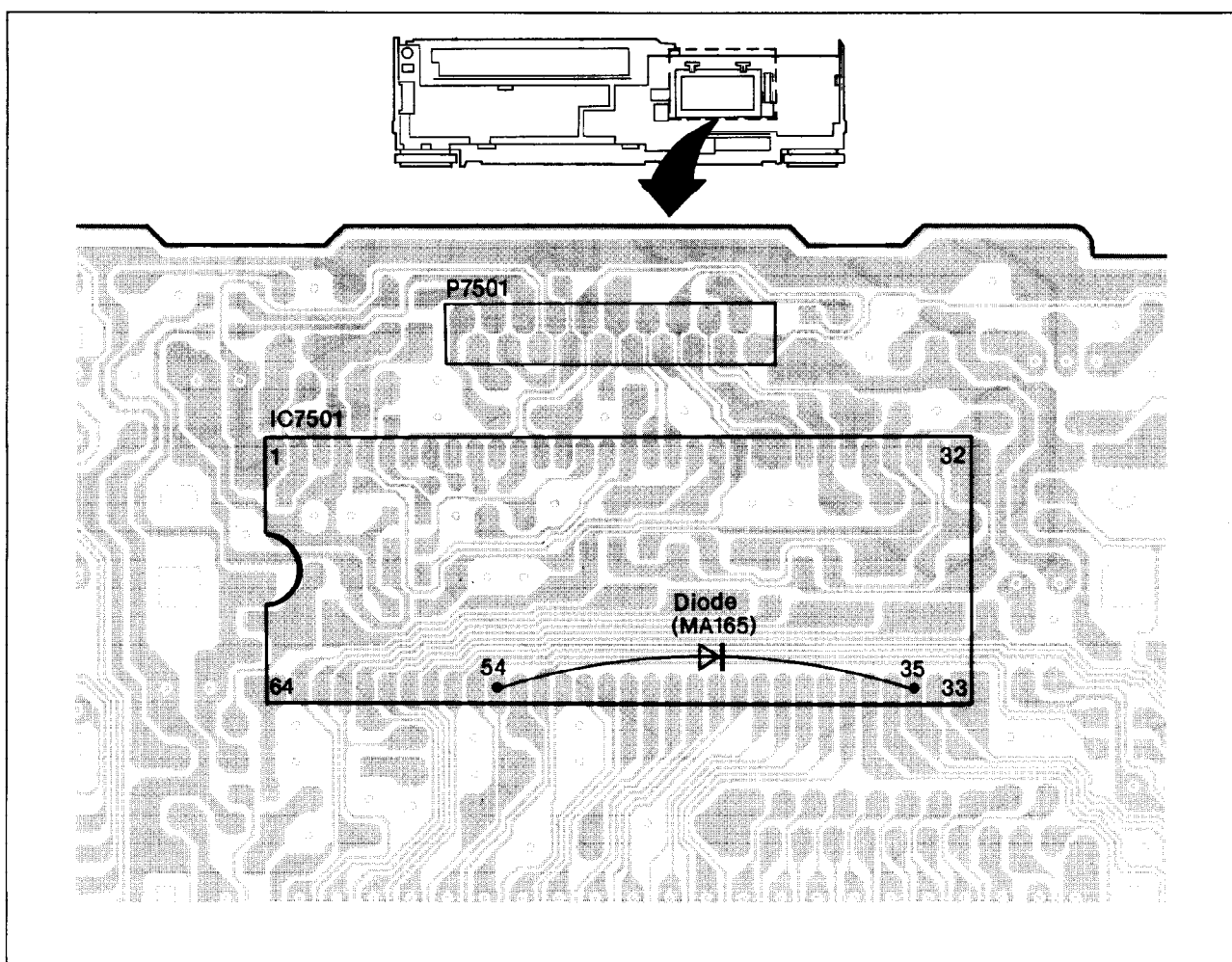


Fig. T1

#### SERVICE NOTE

When repairing without the top panel unit, Tape Select Switch must be set to the E195 position to prevent the malfunction of the Take-Up Photo Sensor.

SERVICE INFORMATION DISPLAY

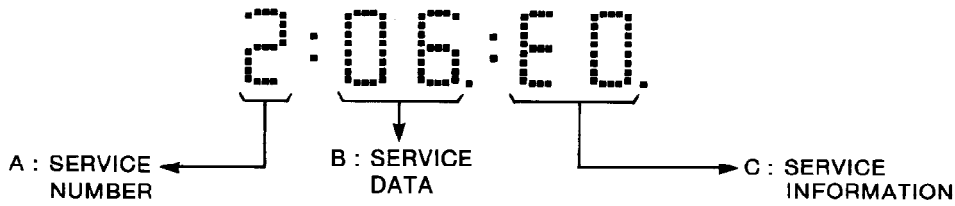
This unit can be confirmed the mode information which is detected by microprocessor IC6001 via multi function display.

Method:

- 1) Press "EJECT", "FF" and "REW" keys at the same time.
- 2) The counter of multi function display indicates microprocessor data approximately 1 minutes as shown in Fig.T2.

Note:

- 1) This mode can be entered even when Power off.
- 2) Also it can be displayed the data when connect jumper wire between TP6001 and TPGND. (Press "EJECT", "FF" and "REW" keys at the same time, increment service number)



A: SERVICE NUMBER	B: SERVICE DATA	
1	*0 (hex)	can not detect Take-up and Supply Photo
	*9 (hex)	detect Take-up Photo
	*U (hex)	detect Supply Photo
	*3 (hex)	detect Take-up and Supply Photo
2	02 (hex)	EJECT
	03 (hex)	CASSETTE IN
	04 (hex)	CASSETTE DOWN
	06 (hex)	STOP 1
	08 (hex)	STOP 2
	0U (hex)	PLAY
3	L* (hex)	STOP 1 → STOP 2
	4* (hex)	PLAY → CUE/REV
	3* (hex)	STOP 2 → PLAY
	2* (hex)	STOP 1 → FF/REW
	1* (hex)	During Unloading
5	1*** ***(bin)	capstan motor ON
	*** 1*** (bin)	capstan motor reverse direction
6	***1 ***(bin)	cylinder motor ON

C : SERVICE INFORMATION

- E0: Normal
- E1: Cylinder lock (STOP)
- E2: Reel lock (STOP)
- E3: Rev Motor lock
- E4: Mechanism lock during unloading
- E5: Mechanism lock during mode transfer to FF or REW
- E6: Mechanism lock during front unloading (Cassette out)
- E9: Serial data (IC6001 – IC7501) can not be transmitted.

Note:

1. "\*" : No meaning
2. "hex": hexadecimal digit
3. "bin" : binary digit

ex.

bin	hex
0000	0
0001	1
⋮	⋮
1010	U
1110	L

Fig. T2

## SECTION 2 ADJUSTMENT PROCEDURES

### 2-1. DISASSEMBLY METHOD

#### 2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing. When assembling, perform the steps in the reverse order.

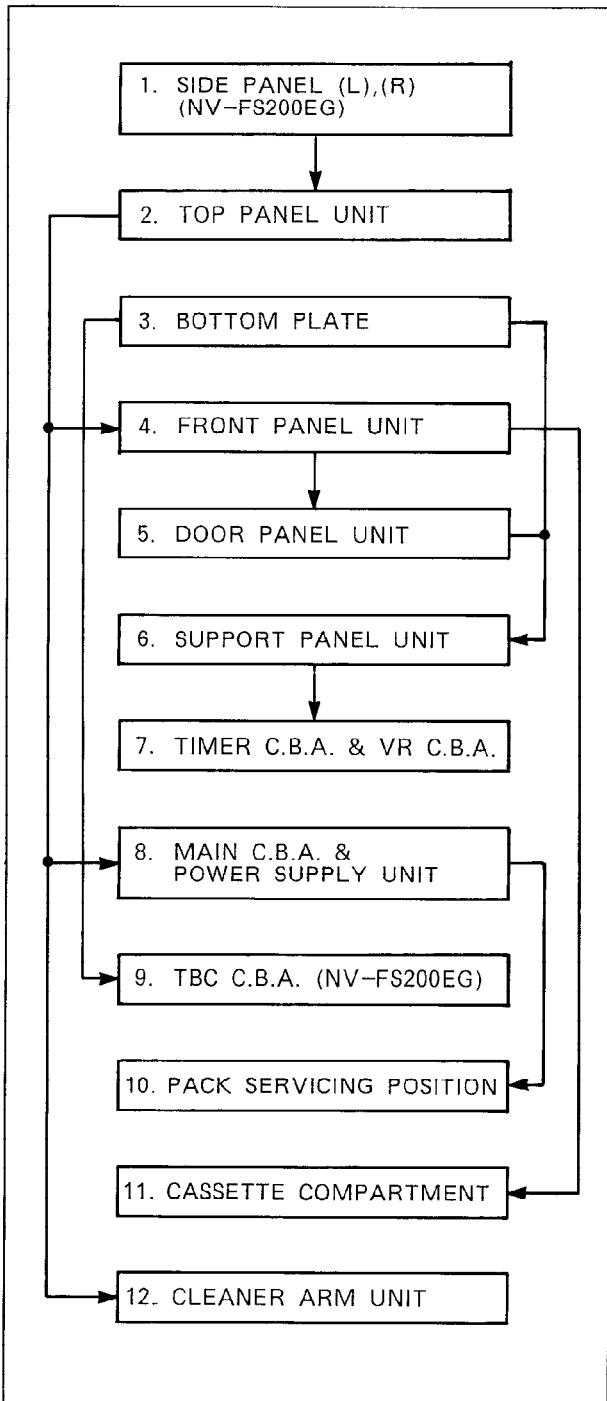


Fig. D1

#### 2-1-2. DETAIL OF DISASSEMBLY METHOD

##### 1. REMOVAL OF THE SIDE PANEL (L),(R) (NV-FS200EG)

Remove.....4 Screws(A)

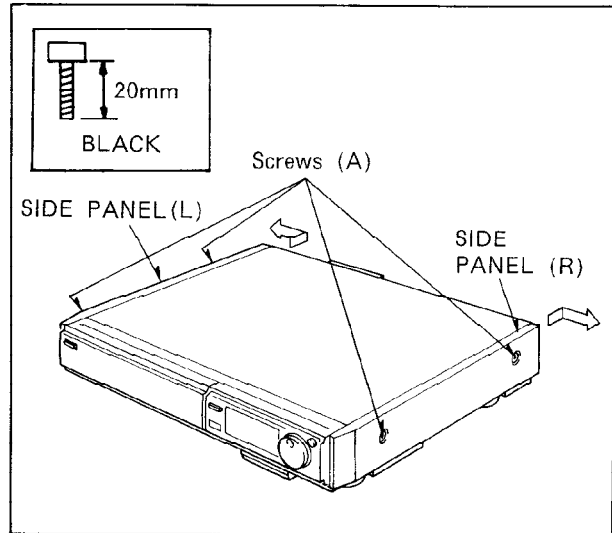


Fig. D2

##### 2. REMOVAL OF THE TOP PANEL UNIT

Remove.....4 Screws(B)

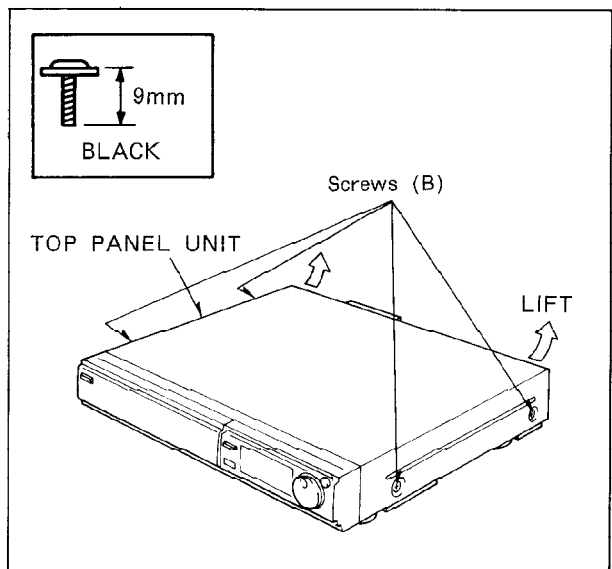


Fig. D3

3. REMOVAL OF THE BOTTOM PLATE

Remove.....9 Screws(C)

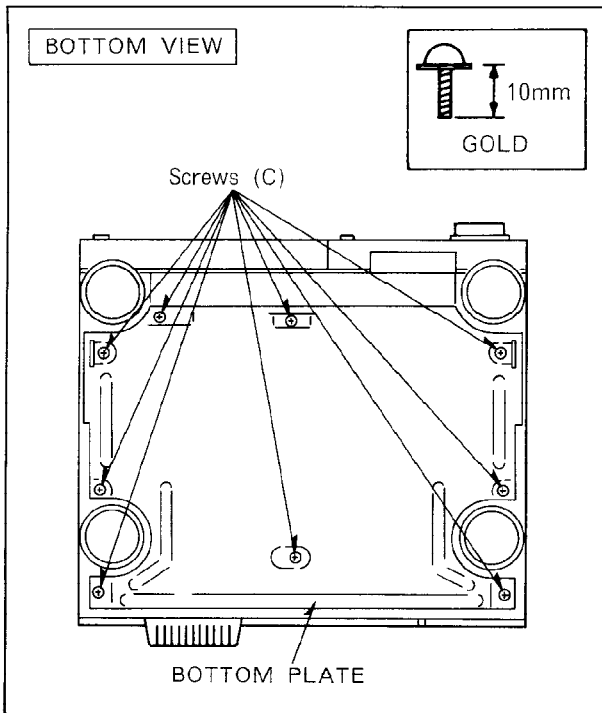


Fig. D4

4. REMOVAL OF THE FRONT PANEL UNIT

Remove.....Screw(D)  
Unlock.....7 Tabs(E)  
(DOOR PANEL.....OPEN)

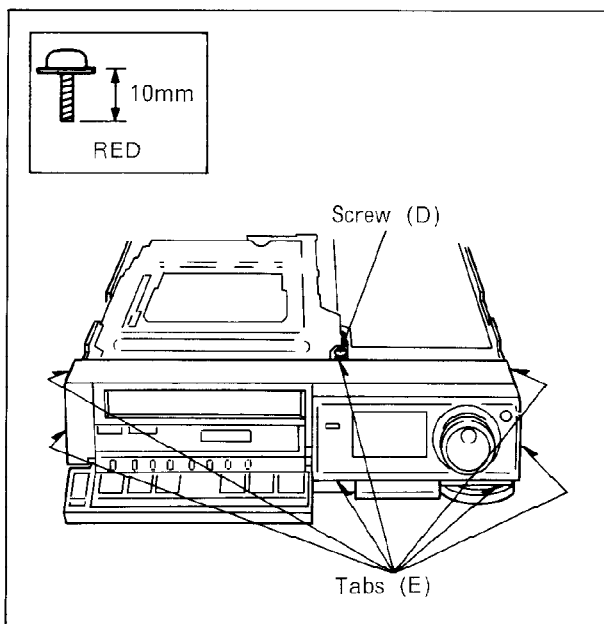


Fig. D5

5. REMOVAL OF THE DOOR PANEL UNIT

Remove.....2 Screws(F)  
Disconnect.....2 Connectors(G)

6. REMOVAL OF THE SUPPORT PANEL UNIT

Remove.....3 Screws(H)  
Unlock.....3 Tabs(I)  
Remove.....Front Jack Cover(NV-FS200EG)

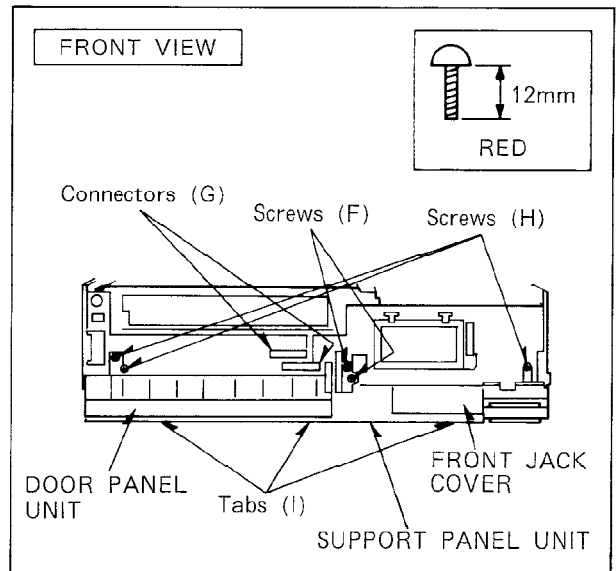


Fig. D6

7. REMOVAL OF THE TIMER C.B.A. & VR C.B.A.

REMOVAL OF THE TIMER C.B.A.

Remove.....Screw(J)  
Unlock.....2 Tabs(K)

REMOVAL OF THE VR C.B.A.

Remove.....Screw(L)  
Unlock.....2 Tabs(M)

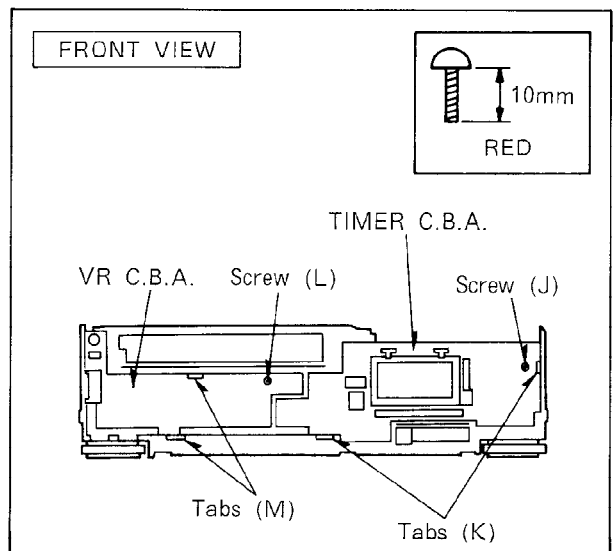


Fig. D7

8. REMOVAL OF THE MAIN C.B.A. & POWER SUPPLY UNIT

REMOVAL OF THE MAIN C.B.A.

- Remove.....Screw(N)
- Remove.....3 Screws(O)
- Remove.....3 Screws(P)

REMOVAL OF THE POWER SUPPLY UNIT

- Remove.....2 Screws(Q)
- Remove.....Screw(R)
- Remove.....2 Screws(S) and Heat Sink Cover
- Remove.....Screw(T) and Heat Sink

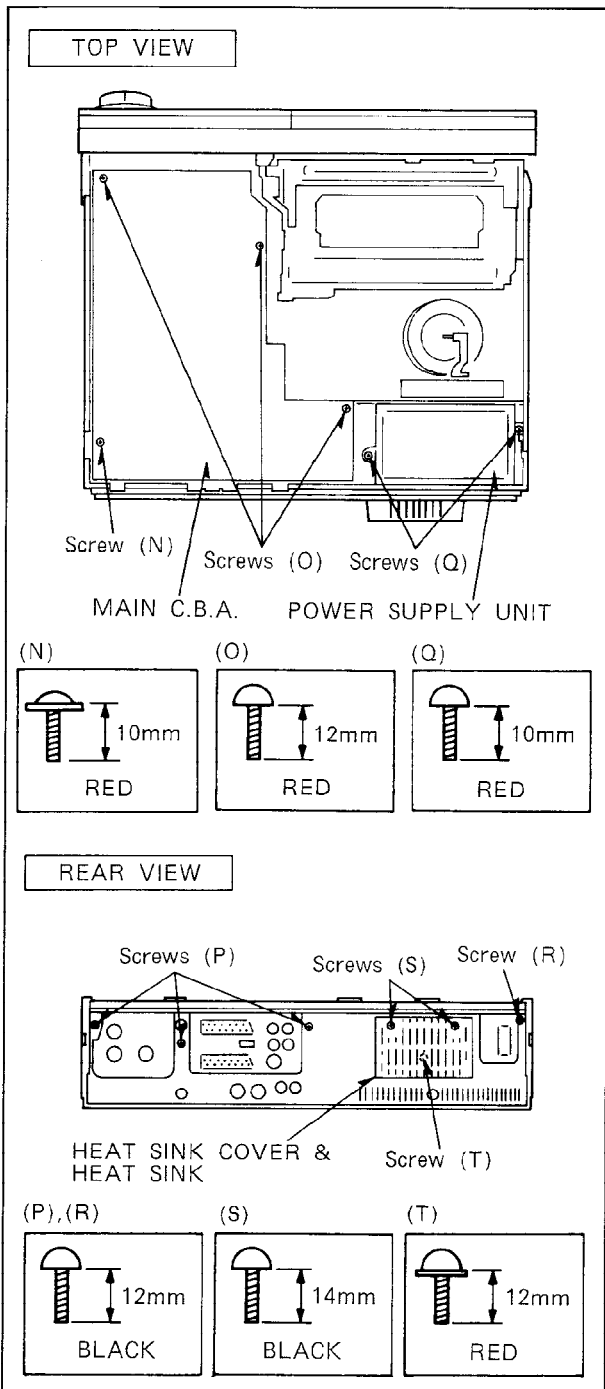


Fig. D8

9. REMOVAL OF THE TBC C.B.A. (NV-FS200EG)

Remove.....4 Screws(U)

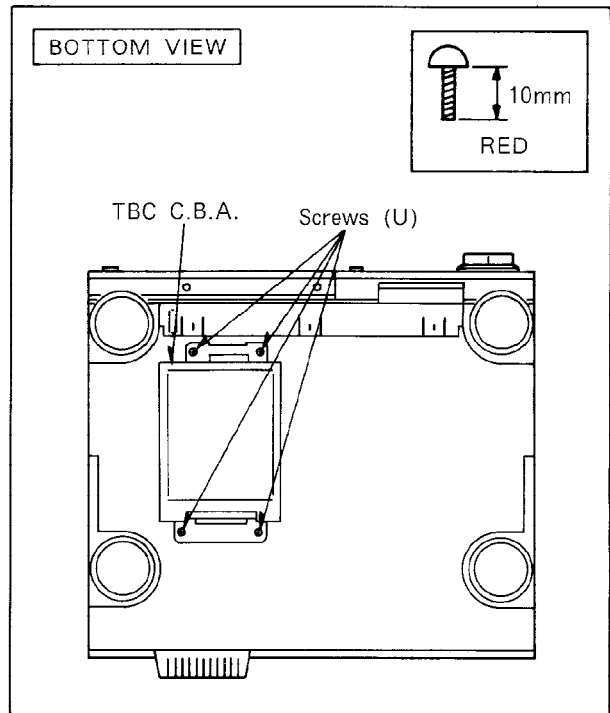


Fig. D9

10. PACK SERVICING POSITION

CAUTION:

Confirm that the isolation between Mechanical Chassis and Main C.B.A. before connecting Main AC.

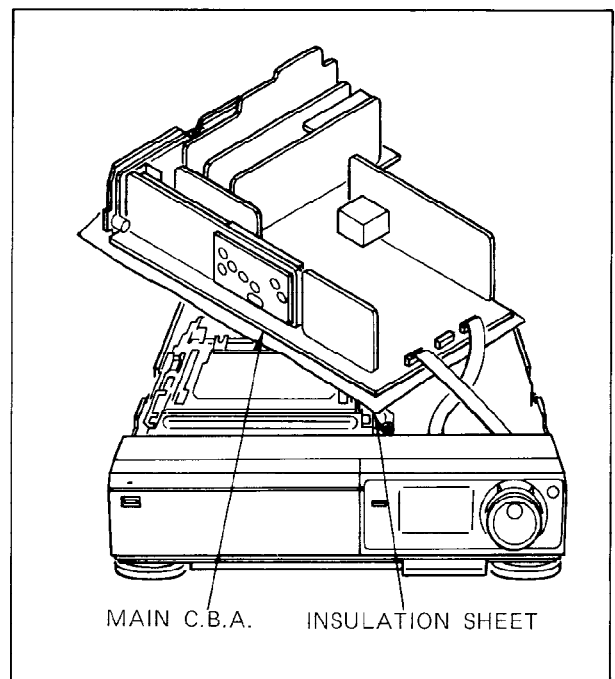


Fig. D10



### 11. REMOVAL OF THE CASSETTE COMPARTMENT

Remove the 2 screws(V) and a screw(W). Slide the cassette holder unit for appearing 2 screws(X) by turning(clockwise) the Capstan Rotor Unit(located in the bottom side as shown in Fig.D12) and remove the 2 screws(X). Remove the wire cable from connector P1508 mounted on Take-up Photo Tr. C.B.A., then carefully pull out the Cassette Compartment.

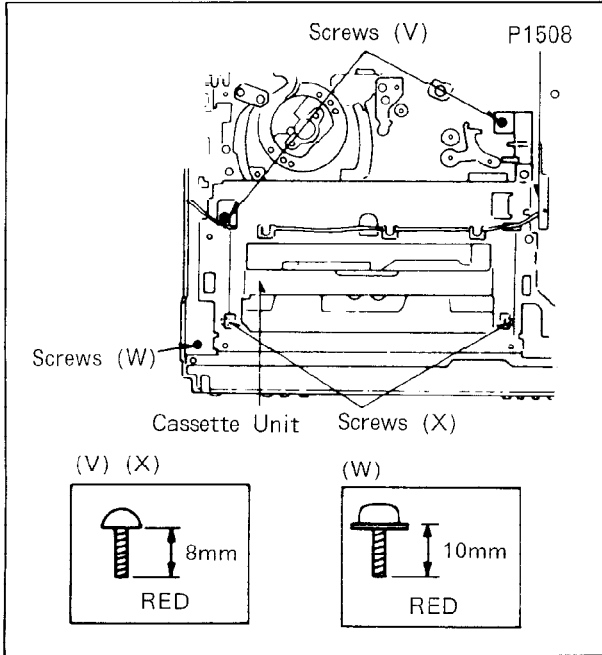


Fig. D11

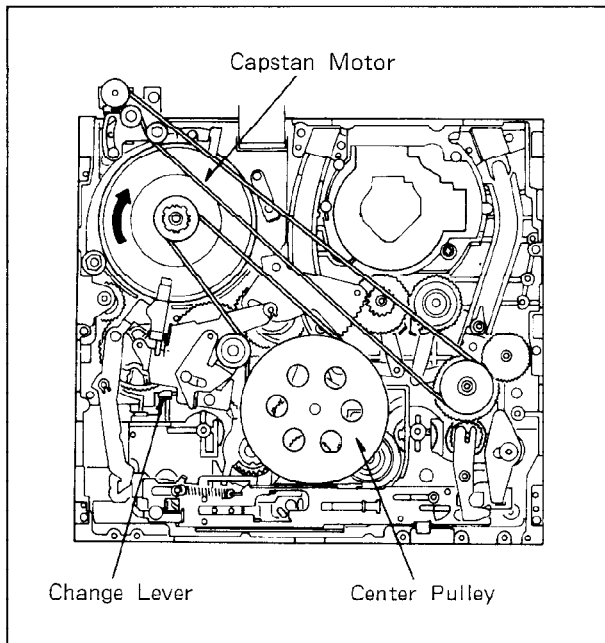


Fig. D12

### 12. REMOVAL OF THE CLEANER ARM UNIT

1. Hook the Spring Arm(a) to lower side of Hook(b).
2. Unlock the locking portion(c) and then remove the Cleaner Arm Unit.

NOTE:

- (1) Perform the steps in the reverse order when Assembling.
- (2) When replacing Upper Cylinder, replace Cleaner Arm at the same time.

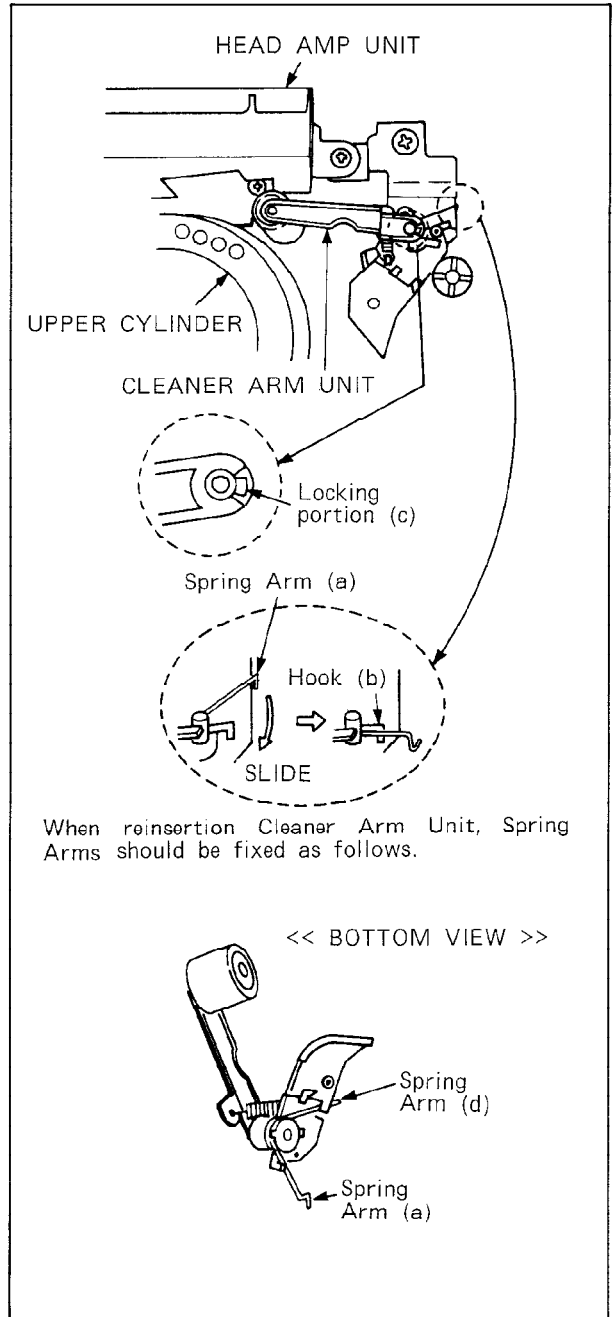


Fig. D13

## 2-2. MECHANICAL ADJUSTMENT PROCEDURES

This mechanical chassis of these model NV-FS200EG, FS88EG is the same as (G-II) Mechanical Chassis. Therefore please refer to the Service Manual "G-II/G-REV"(Order No. VRD8901M101).

### 2-2-1. TAPE INTERCHANGEABILITY ADJUSTMENT

#### CAUTIONS:

Make a Adjustment Mode as shown in Fig.M1 (Connect a Cut Jumper Wire).

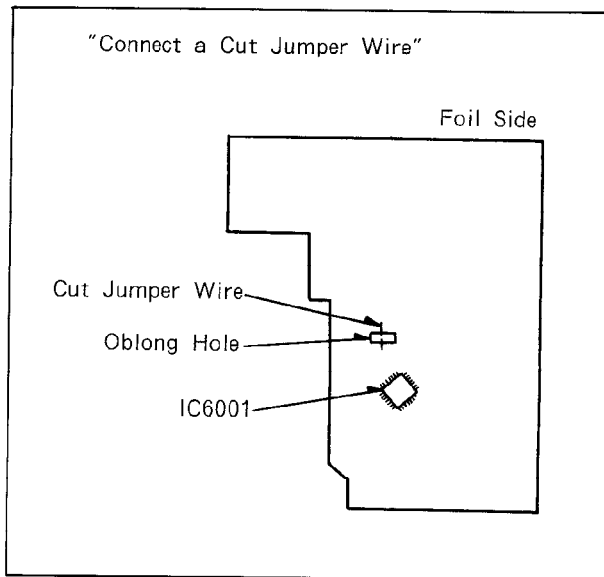
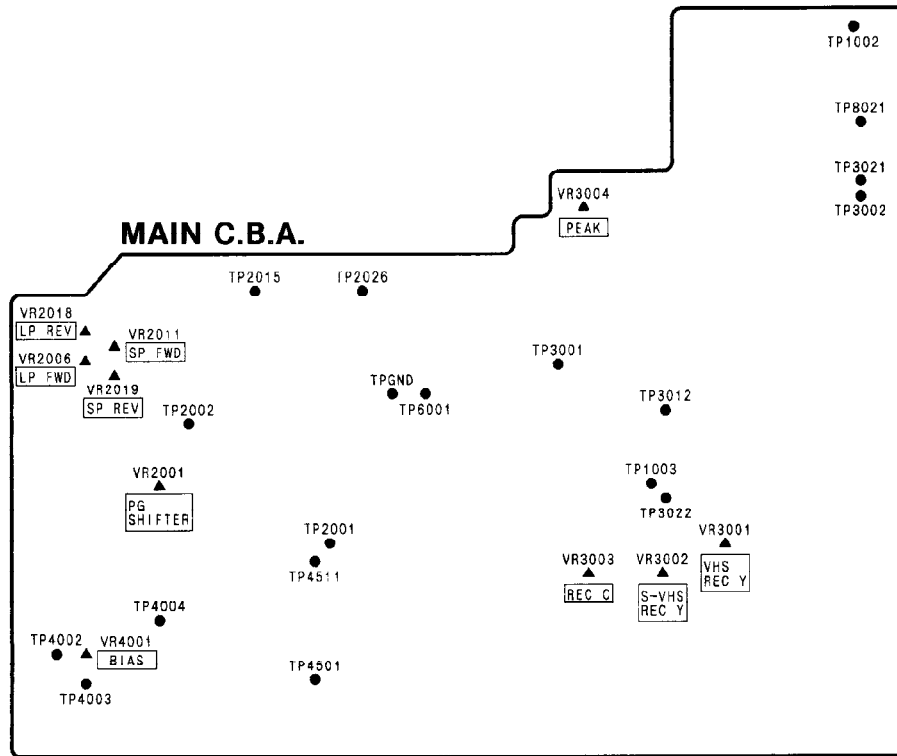
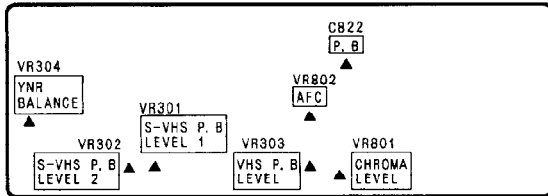


Fig. M1 Adjustment Mode

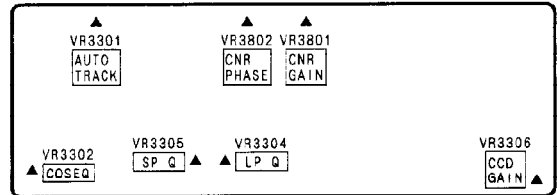
# LOCATION OF TEST POINTS & CONTROLS



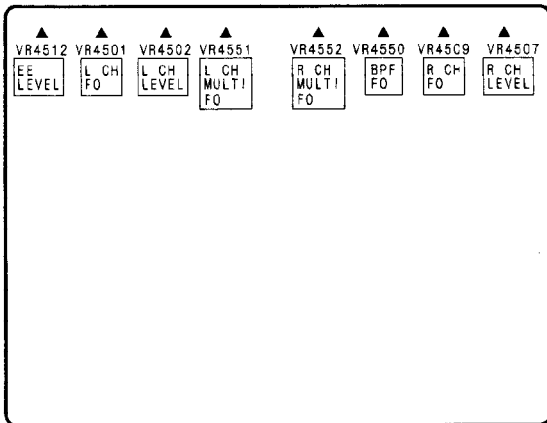
## LUMINANCE & CHROMINANCE PACK C.B.A.



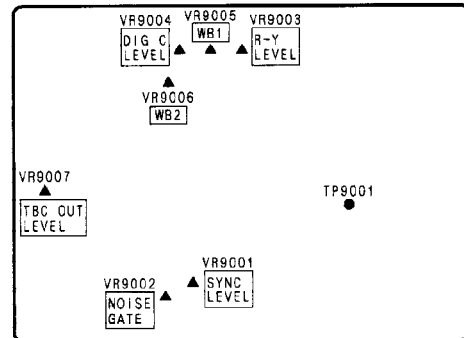
## SUB LUMINANCE & CHROMINANCE PACK C.B.A.



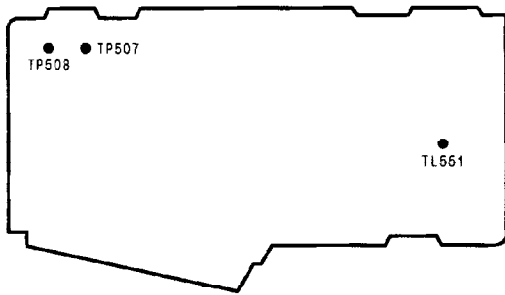
## Hi-Fi AUDIO PACK C.B.A.



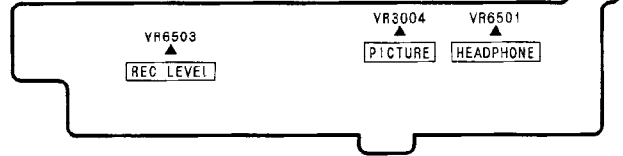
## TBC C.B.A.



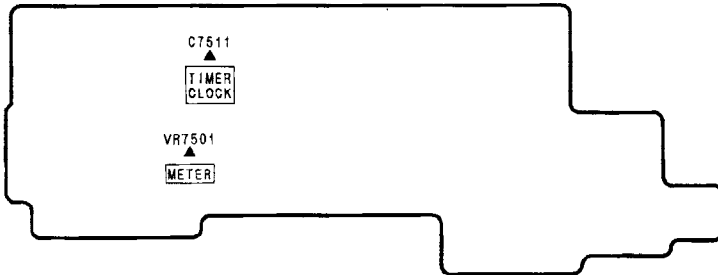
### HEAD AMP C.B.A.



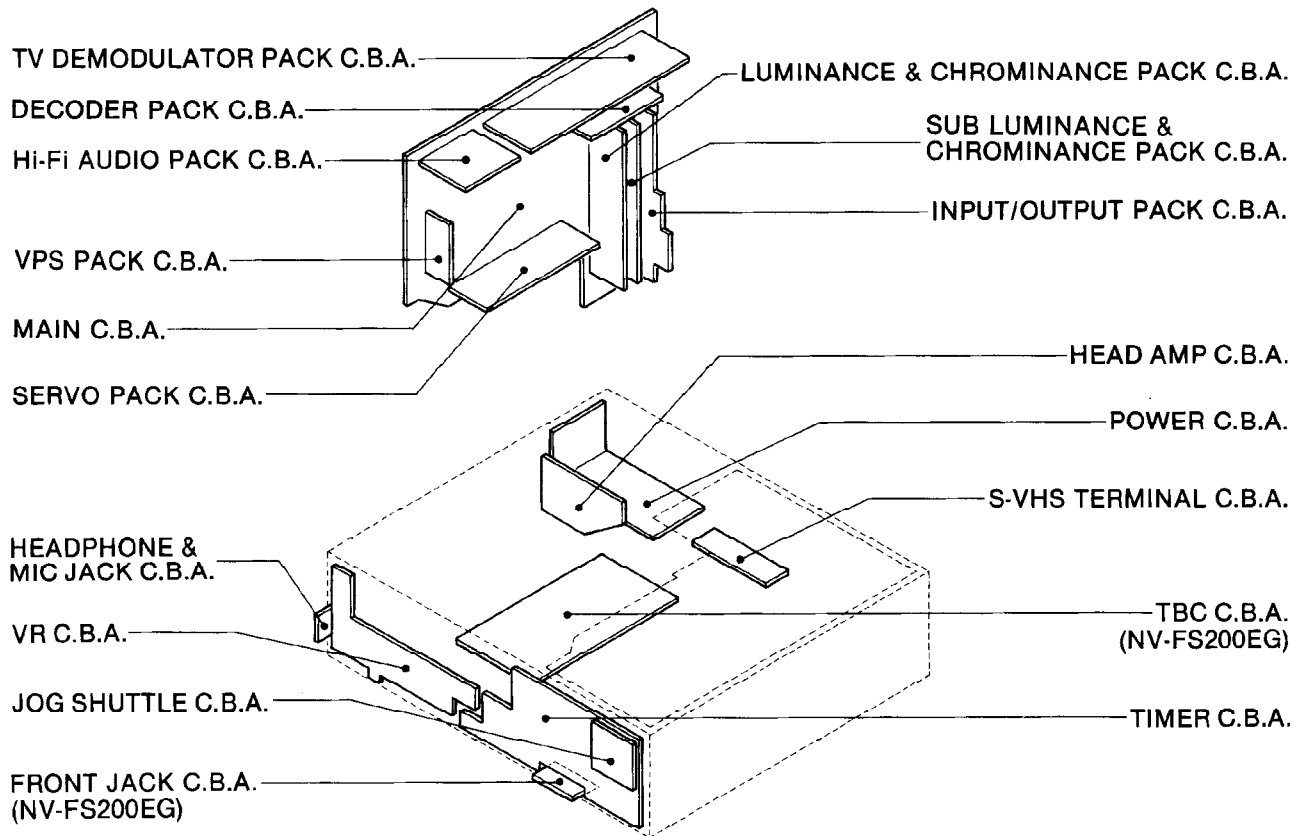
### VR C.B.A.



### TIMER C.B.A.



## CIRCUIT BOARD LAYOUT



## 2.3. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete electrical adjustment procedures which may be required for electronic circuits of S-VHS Video Cassette Recorders NV-FS200EG, FS88EG.

### 2-3-1. TEST EQUIPMENTS

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)  
Voltage Range : 0.001 ~ 50V
2. Dual-Trace Oscilloscope  
Voltage Range : 0.005 ~ 50V/div.  
Frequency Range : DC-30MHz  
Probes : 10:1
3. Frequency counter  
Frequency Range : 0 ~ 10MHz
4. Signal Generator (Sinewave)  
Frequency Range : 0 ~ 50MHz
5. Video Sweep Generator  
Frequency Range : 0 ~ 10MHz
6. Colour Monitor TV
7. Plastic Tip Driver
8. VHS Alignment Tape (VFJ8125H3F)
9. Pattern Generator
10. VHS Blank Tape
11. S-VHS Blank Tape

### 2-3-2. HOW TO READ THE ADJUSTMENT PROCEDURES

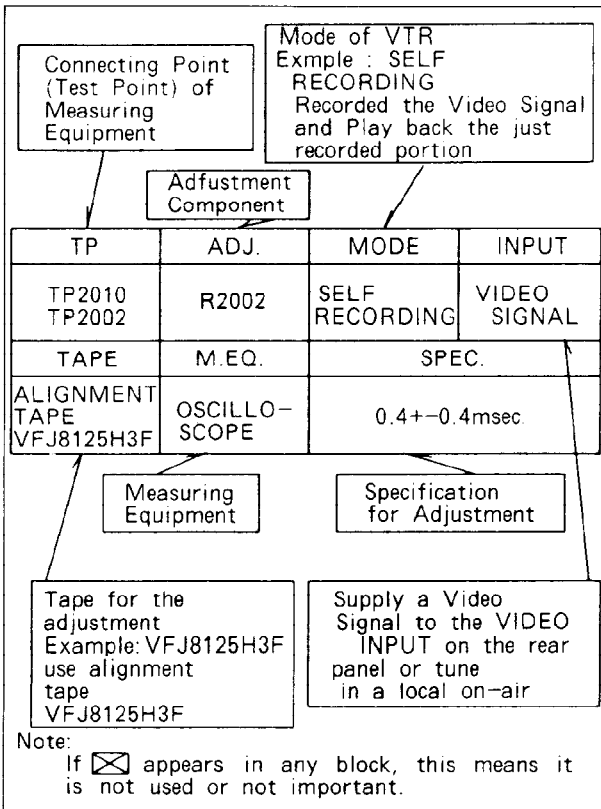


Fig. E1

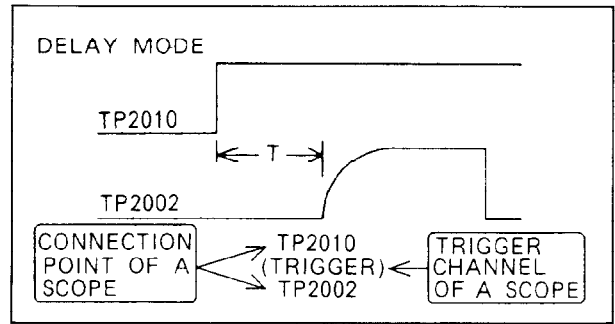


Fig. E2

#### Note:

Before the electrical adjustment, set the VTR as following conditions except for especial instructions in each adjustment item.

1. Noise Filter SW...OFF
2. Hi-Fi/Normal MIX SW...OFF
3. Tape Select SW...-E195
4. Remote Mode SW...VTR1
5. Picture VR...FIX
6. Audio REC VR...FIX
7. Phones Level VR...MIN
8. JOG/SHUTTLE...CENTER
9. Audio Output Mode...Hi-Fi MODE
10. S-VHS SW...ON
11. Input Select Front SW...  
S-VIDEO(NV-FS200EG ONLY)
12. Search Sound SW...OFF
13. TBC SW...OFF (NV-FS200EG ONLY)
14. Normal Y/C Test SW...NORMAL

## SERVO Section

### 2-3-3. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP3002	VR2001	PLAYBACK	X
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO- SCOPE	7.0+ -0.5H	

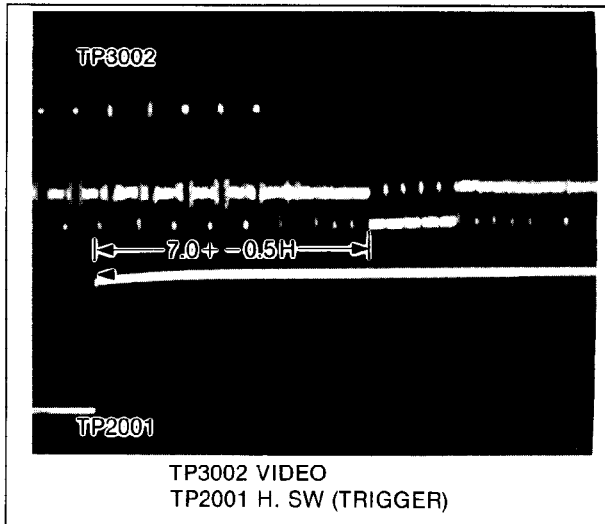


Fig. E3

### 2-3-4. AUTO TRACKING GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PS3011-1	VR3301	PLAYBACK	4MHz 200mVp-p (TO TP3001)
TAPE	M. EQ.	SPEC.	
X	SIGNAL GENERATOR/ D.V.M.	3.1+ -0.1Vp-p	

1. Set the output of Sinewave Signal Generator to 4MHz, 200mVp-p and supply it to TP3001.
2. Connect the D.V.M. (Digital Volt Meter) to Pin 1 of SUB Y/C pack C.B.A..
3. Adjust VR3301 so that reading of D.V.M. is 3.1+ -0.1(Vp-p).

### 2-3-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
ON THE MONITOR SCREEN	VR2011 (SP FWD) VR2019 (SP REV) VR2006 (LP FWD) VR2018 (LP REV)	SELF RECORDING AND SLOW (SP/LP MODE)	COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	TV MONITOR	REFER TO PROCEDURE	

#### NOTE:

1. Each slow speed is not specified.
2. Push the tracking button "+" and "-" at the same time.
1. Record the colour bar in SP mode for few time and then Record the colour bar in LP mode for few time.
2. Playback the just recorded SP portion and place the unit in forward SLOW mode.
3. Adjust VR2011 so that noise band to be minimized.
4. Place the unit in reverse SLOW mode.
5. Adjust VR2019 so that noise band to be minimized.
6. Playback the just recorded LP portion and place the unit in forward SLOW mode.
7. Adjust VR2006 so that noise band to be minimized.
8. Place the unit in reverse SLOW mode.
9. Adjust VR2018 so that noise band to be minimized.

## LUMINANCE, CHROMINANCE & HEAD AMP Section

### 2-3-6. CHROMINANCE & LUMINANCE RECORDING CURRENT ADJUSTMENT

#### S-VHS CHROMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3003	RECORDING (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
S-VHS BLANK TAPE	OSCILLO- SCOPE	28+ - 2mVp-p	

1. Supply the colour bar signal to video input of AV1.
2. Supply the DC 5V to Pin 6 of Y/C pack C.B.A. to reduce luminance component.
3. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
4. Adjust VR3003 for  $28 \pm 2\text{mVp-p}$  as shown in Fig.E4.

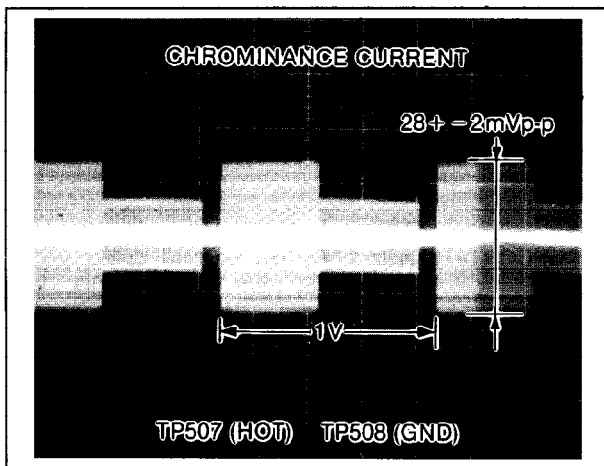


Fig. E4

#### S-VHS LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3002	RECORDING (SP MODE)	COLOUR BAR (S-VIDEO IN)
TAPE	M. EQ.	SPEC.	
S-VHS BLANK TAPE	OSCILLO- SCOPE	110+ - 5mVp-p	

5. After chrominance recording current adjustment, remove the DC 5V to Pin 6 of Y/C pack C.B.A.

6. Adjust VR3002 for  $110 \pm 5\text{mVp-p}$  as shown in Fig.E5.

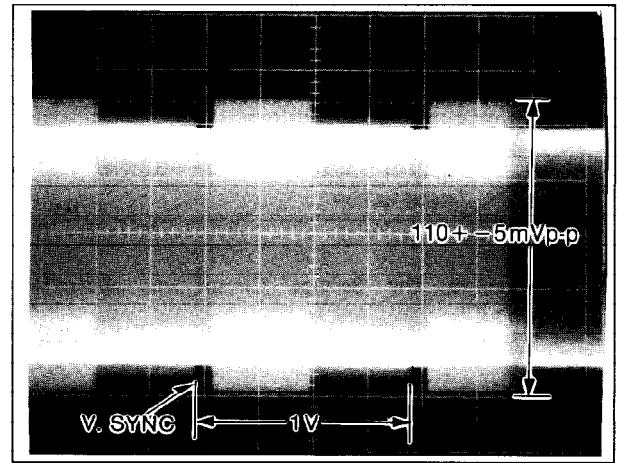


Fig. E5

#### VHS LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3001	RECORDING (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
VHS BLANK TAPE	OSCILLO- SCOPE	120+ - 5mVp-p	

1. Set the S-VHS SWITCH OFF position.
2. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
3. Adjust VR3001 for  $120 \pm 5\text{mVp-p}$  as shown in Fig.E6

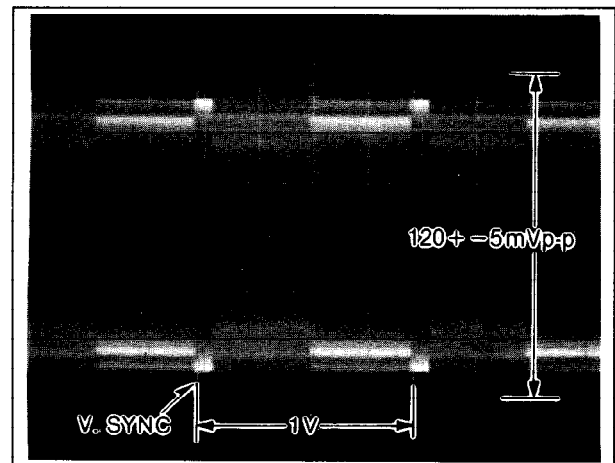


Fig.E6

This adjustment should be completed after S-VHS luminance and chrominance recording current adjustment.

2-3-7. RF PEAK FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3011-18	VR3004	EJECT	SWEEP SIGNAL (150mVp-p, 7MHz) (PP3011-14)
TAPE	M. EQ.	SPEC.	
	OSCILLOSCOPE/ VIDEO SWEEP GENERATOR	7.0+ -0.2MHz	

NOTE:

1. Connect the Service Circuit as shown in Fig.E7.
2. VR3002 is center position.
1. Set the output signal of sweep generator to 150mmVp-p, 7MHz (Video signal only).
2. Connect the Pin 17 of Y/C Pack C.B.A. (PP3002) to GND (compulsory S-VHS).
3. Supply set up video sweep signal to input point of service circuits.
4. Connect the oscilloscope to Pin 18 of SUB Y/C Pack c.b.a. (PP3011)
5. Adjust VR3004 so that the peak frequency becoems 7.0+-0.2MHz as shown in Fig.E8.

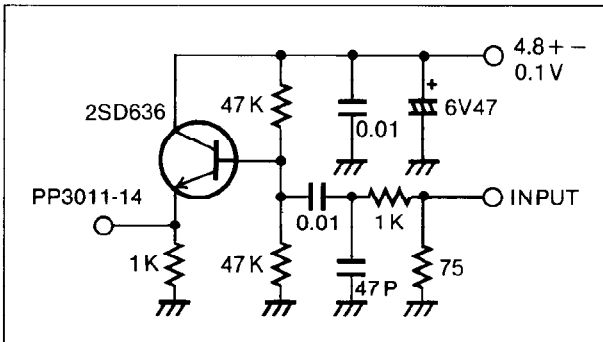


Fig. E7

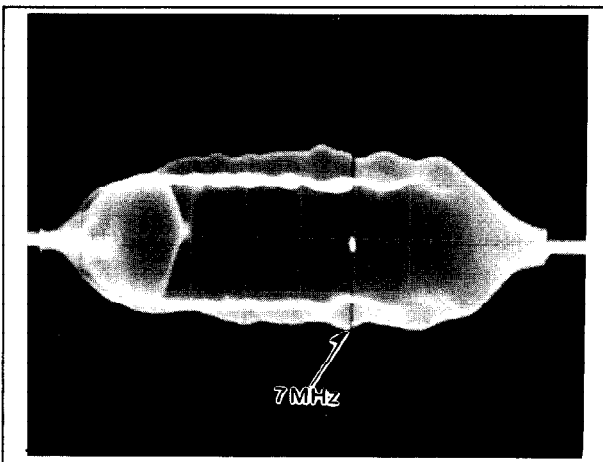


Fig. E8

2-3-8. S-VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR3302	SELF RECORDING AND PLAYBACK (SP MODE)	SWEEP SIGNAL (S-VIDEO IN)
TAPE	M. EQ.	SPEC.	
S-VHS BLANK TAPE	OSCILLOSCOPE/ VIDEO SWEEP GENERATOR	A : B = -4.5±1dB (50~70%)	

NOTE:

1. Set the output of video sweep generator as shown in Fig.E9.
2. This adjustment must be done after RF peak frequency adjustment.

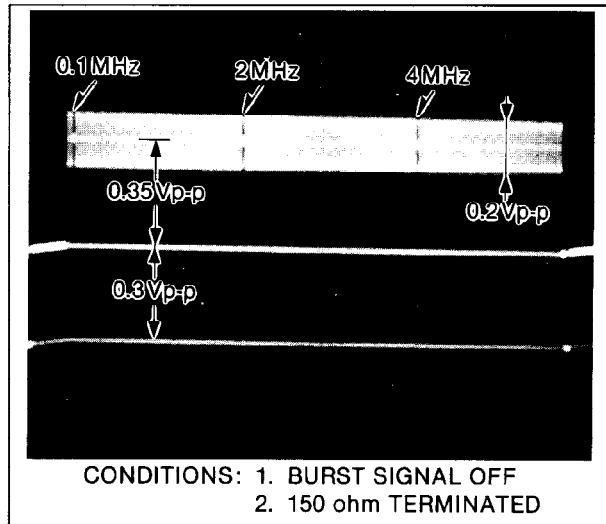


Fig. E9

1. Supply set up video sweep signal to S-VIDEO-IN.
2. Record the input signal in SP mode for few time.
3. Playback the just recorded portion.
4. Connect the oscilloscope to TP3021.
5. Adjust VR3302 so that the ratio of 0.1MHz level and 4MHz level(A:B) to be 50~70% as shown in Fig.E10. (Measure wide amplitude channel on 4MHz)



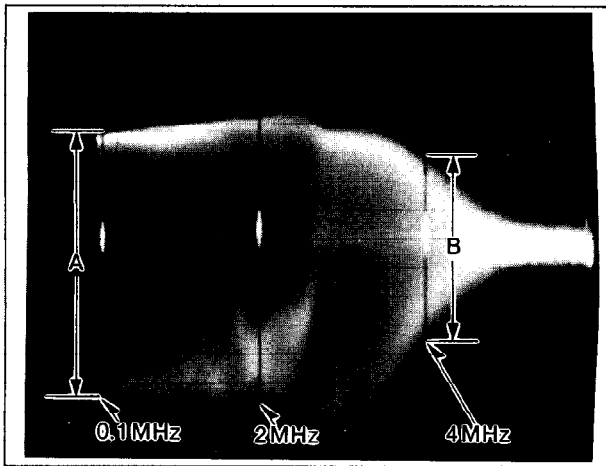


Fig. E10

1. Supply set up video sweep signal to Video input of AV1 and record input signal in SP mode for few time and record in LP mode also few time.
2. Playback the just recorded portion in SP mode.
3. Connect the oscilloscope to TP3021.
4. Adjust VR3305 so that the ratio of 0.1MHz level and 2MHz level (A:B) to be  $0 \pm 1\text{dB}$  (90% ~ 110%) as shown in Fig.E12.
5. Playback the just recorded portion in LP mode.
6. Adjust VR3304 so that the ratio of 0.1MHz level and 2MHz level (A:B) to be  $0 \pm 1\text{dB}$  (90% ~ 110%) as shown in Fig.E13.

2-3-9.VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR3305 (SP) VR3304 (LP)	SELF RECORDING AND PLAYBACK (SP/LP MODE)	SWEEP SIGNAL
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE/ VIDEO SWEEP GENERATOR	SP: $0 \pm 1\text{dB}$ (90~110%) LP: $0 \pm 1\text{dB}$ (90~110%)	

NOTE:

Set the output of video sweep generator as shown in Fig.E11

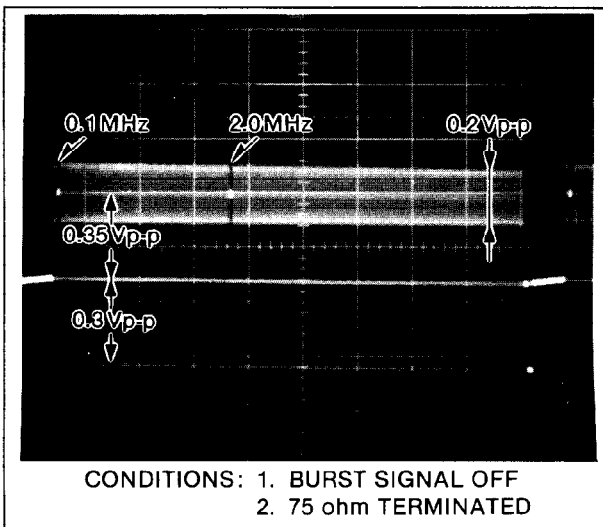


Fig. E11

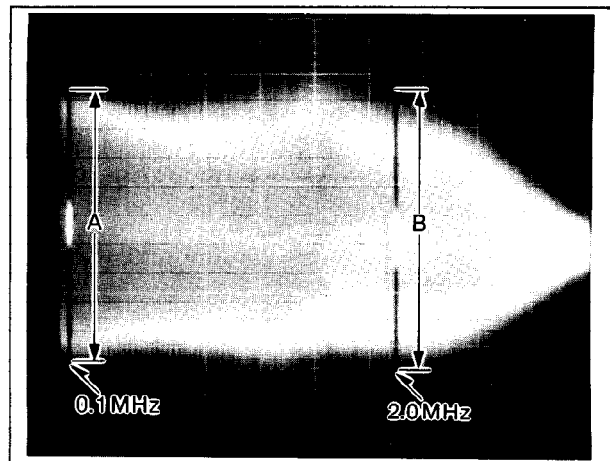


Fig. E12: SP MODE

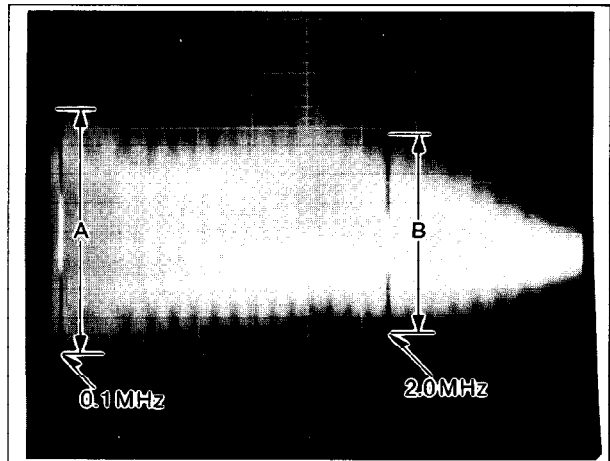


Fig. E13: LP MODE

2-3-10. LUMINANCE NOISE REDUCTION  
BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC301-34	VR304	RECORDING (LP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE	WAVEFORM IS MINIMIZED	

NOTE:

Connect the capacitor(1500pF) between Pin 34 of IC301 and GND as shown in Fig.E14.

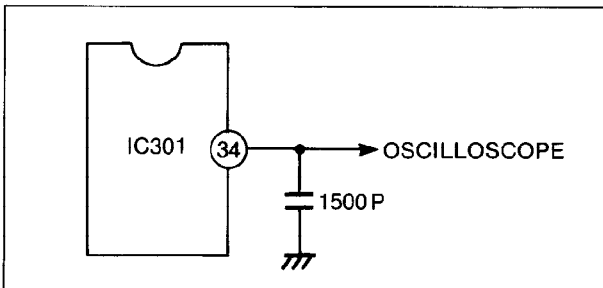


Fig. E14

1. Supply colour bar Signal to video input of AV1 and record input in signal LP mode for few time.
2. Connect the Oscilloscope to Pin 34 of IC301.
3. Adjust VR304 so that waveform becomes minimum as shown in Fig.E16.

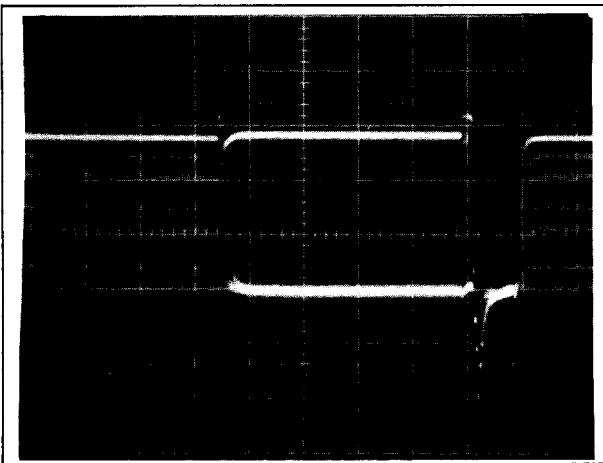


Fig. E15 Before ADJ.

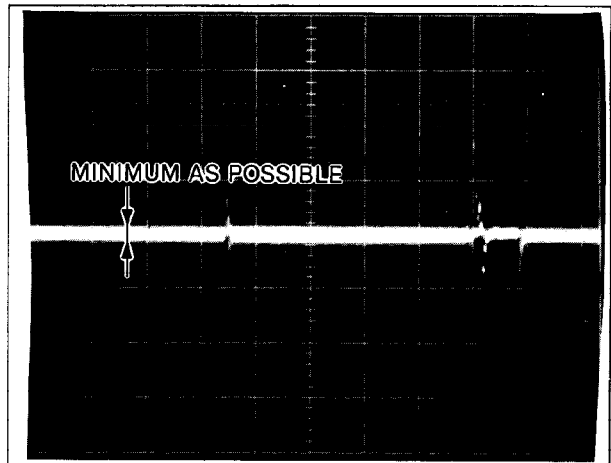


Fig. E16 After ADJ.

2-3-11. CHROMINANCE RECURSIVE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3801-9	VR3801 VR3802	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE	MINIMUM WAVEFORM	

1. Supply colour bar signal to video input of AV1 and record input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 9 of IC3801.
4. Adjust VR8301 and VR8302 mutually so that the chrominance amplitude to be minimum as shown in Fig.E18

NOTE:

Confirm this adjustment after complete recording current adjustment.

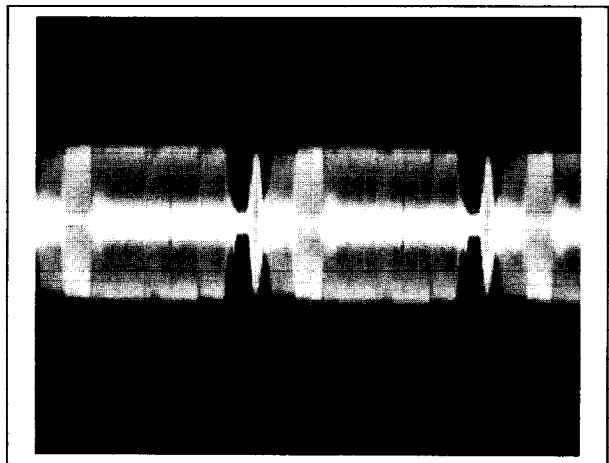


Fig. E17 Before ADJ.

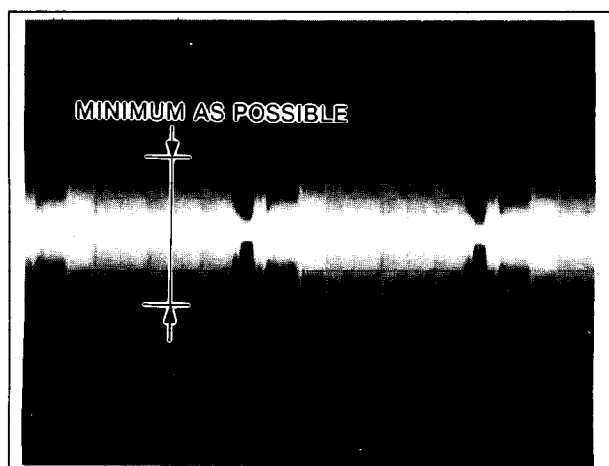


Fig. E18 After ADJ.

2-3-12. ARTIFICIAL NTSC AFC FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC803-9	VR802	STOP	SINEWAVE 8kHz -10dB (316mV) (AV1 IN)
TAPE	M. EQ.	SPEC.	
X	FREQUENCY COUNTER/ SINEWAVE GENERATOR	15735+ -100 (Hz)	

NOTE:

Supply +5V DC to Pin 15 of IC803.

1. Supply the sinewave(8KHz/-10dB) to video input of AV1.
2. Connect the frequency counter to Pin 9 of IC803.
3. Turn VR802 to end of direction which is maximum frequency side.
4. Adjust VR802 so that the frequency becomes 15735+-100(Hz).

2-3-13. VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR303	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE	1.0+ -0.05Vp-p	

NOTE:

S-VHS should be off.

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP3021.
4. Adjust VR303 so that the luminance level to be 1.0+-0.05Vp-p.

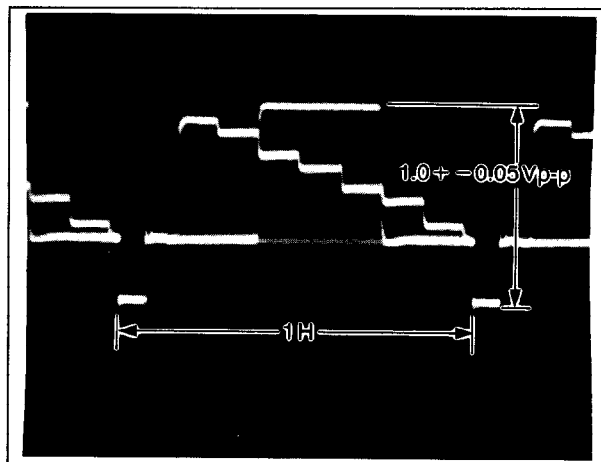


Fig. E19

2-3-14. S-VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3022 TP3021	VR301 (S-P.B 1) VR302 (S-P.B 2)	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
S-VHS BLANK TAPE	OSCILLO- SCOPE	TP3022: 400+ -10mVp-p TP3021: 1.0+ -0.05Vp-p	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP3022.
4. Adjust VR301 so that the luminance level to be 400+-10mVp-p as shown in Fig.E20.

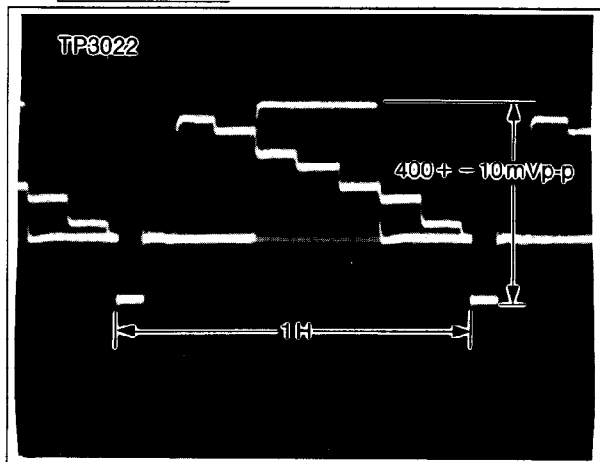


Fig. E20

5. Connect the oscilloscope to TP3021.
6. Adjust VR302 so that the luminance level to be  $1.0 \pm 0.05 \text{Vp-p}$  as shown in Fig.E21.

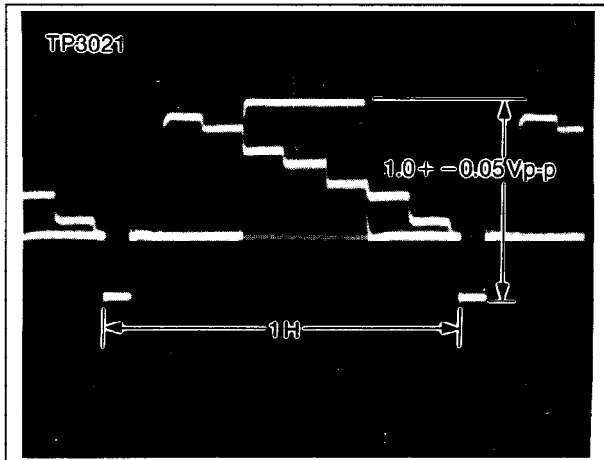


Fig. E21

#### 2-3-15. CHROMINANCE PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8021	VR801	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
VHS BLANK TAPE	OSCILLOSCOPE	CYAN: $0.55 \pm 0.05 \text{Vp-p}$	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP8021.
4. Adjust VR801 so that the playback cyan level to be  $0.55 \pm 0.05 \text{mVp-p}$  as shown in Fig.E22.

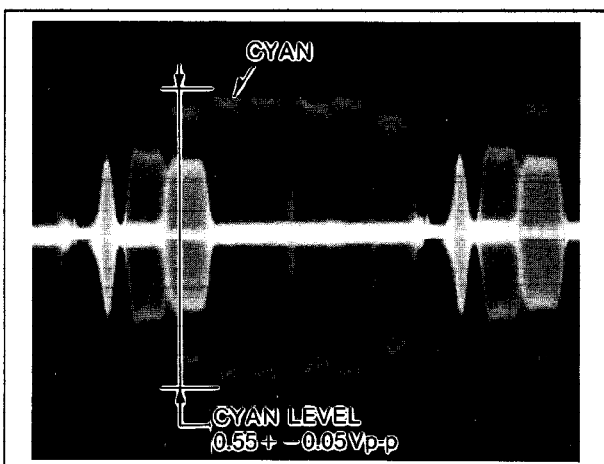


Fig.E22

#### 2-3-16. CCD GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PS3012-33	VR3306	STOP	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
X		OSCILLOSCOPE	A : B = $50 \pm 1.5\%$

1. Supply colour bar signal to video input of AV1.
2. Connect the oscilloscope to Pin 31 and Pin 33 of Sub Y/C pack C.B.A.(PS3012)
3. Reading the level to pin 31 of Sub Y/C pack C.B.A.(PS3012)
4. Adjust VR3306 so that the level of pin 31(B) of the level of pin 33(A) of Sub Y/C pack C.B.A. (PS3012) to  $50 \pm 1.5\%$  as shown in Fig.E23.

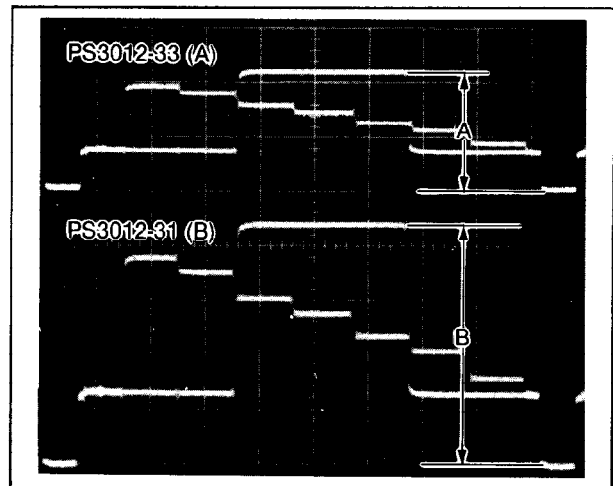


Fig. E23

#### 2-3-17. PILOT BURST PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-15	C822	EJECT	COLOUR BAR (S-VIDEO IN)
TAPE	M. EQ.	SPEC.	
X		VECTORSCOPE	$-95 \pm 5^\circ$

#### NOTE:

1. S-VHS SW should be ON.
2. Connect jumper wire between Pin 5 of IC801 and GND.
3. Add DC 2.5V to Pin 37 of IC801.
4. Supply 4.43MHz(Pin 42 of Y/C pack C.B.A. (PA3003)) ot vectorscope EXT. REF terminal.

1. Supply Y/C separated colour bar signal to S-VIDEO-IN.
2. Adjust C822 so that the pilot burst phase comes  $-95 \pm 5'$  as shown in Fig.E24.

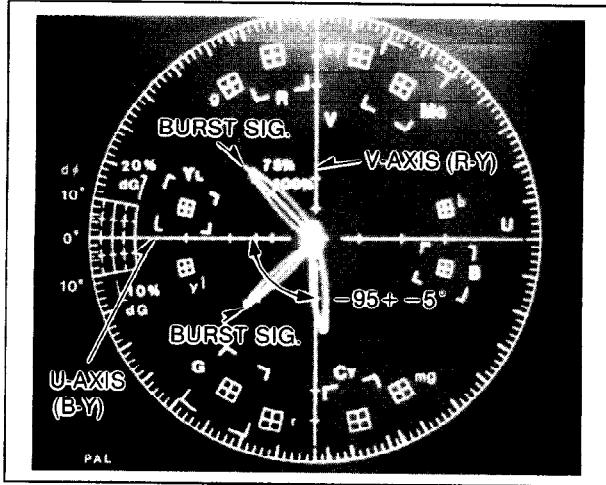


Fig. E24

2-3-18. TBC NOISE GATE ADJUSTMENT  
(NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
TP9001	VR9002	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	B = $1.0 \pm 0.1 \mu\text{sec}$	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP9001.
4. Adjust VR9002 so that the noise gate width "B" to be  $1.0 \pm 0.1 \mu\text{s}$  as shown in Fig.E25.

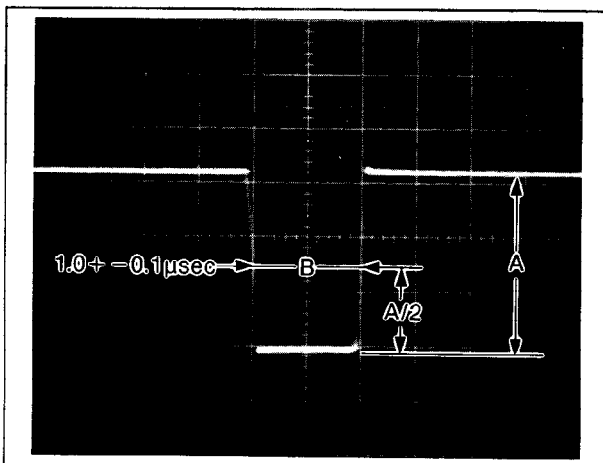


Fig. E25

2-3-19. TBC SYNC LEVEL ADJUSTMENT  
(NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
P9001-1	VR9001	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	B/A = $43 \pm 2\%$	

NOTE:

TBC SW should be ON.

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 1 of P9001.
4. Adjust VR9001 so that the ratio of video and sync "B/A" to be  $43 \pm 2\%$  as shown in Fig.E26.

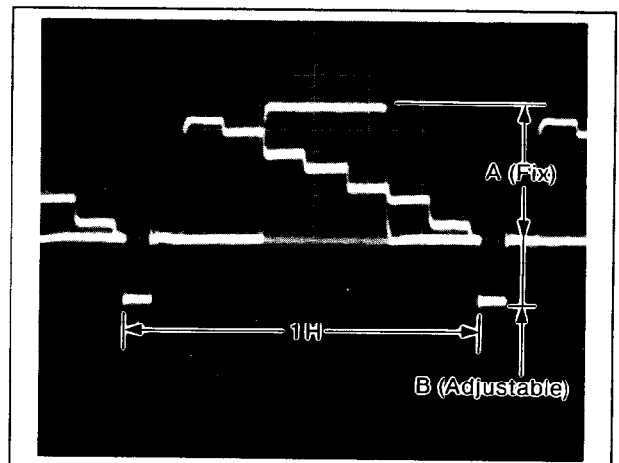


Fig. E26

2-3-20. TBC WHITE BALANCE ADJUSTMENT  
(NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
P9001-5	VR9005 VR9006	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	MINIMUM AC COMPONENT ON WHITE PORTION	

NOTE:

TBC SW should be ON.

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 5 of P9001.
4. Adjust VR9005 and VR9006 mutually so that the signal of white portion to be minimized as shown in Fig.E27.

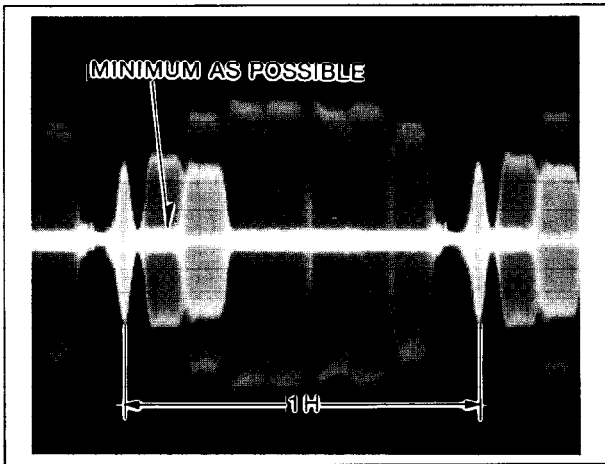


Fig. E27

2-3-21. TBC R-Y LEVEL ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
AV1 OUT	VR9003	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	VECTOR-SCOPE	TBC ON AND OFF RED VECTOR PHASE DIFFERENCE IS $\pm 3^\circ$	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Confirm the RED vector phase when TBC SW off.
4. Turn on the TBC SW and adjust VR9003 so that the red vector comes  $\pm 3^\circ$  compare with TBC SW off condition as shown in Fig.E28.

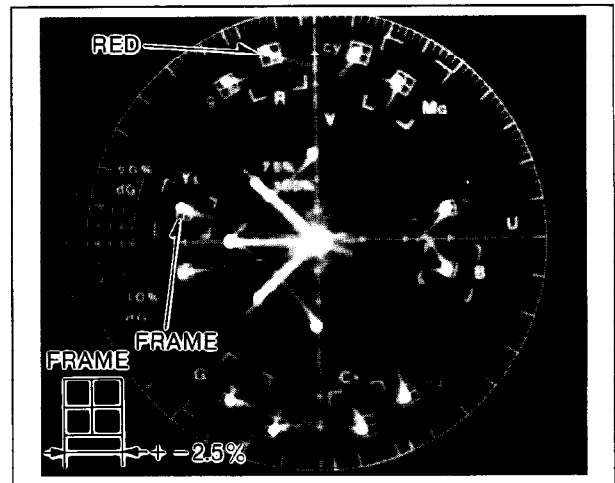


Fig. E28

2-3-22. TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
AV1 OUT	VR9004	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	VECTOR-SCOPE	TBC ON AND OFF BURST LEVEL BECOMES SAME	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Adjust GAIN VR on vectorscope so that the burst vector gain to be 75% when TBC SW off.
4. Turn on the TBC SW and adjust VR9004 so that the burst vector gain to be same as the TBC SW off condition(75%) as shown in Fig.E29.

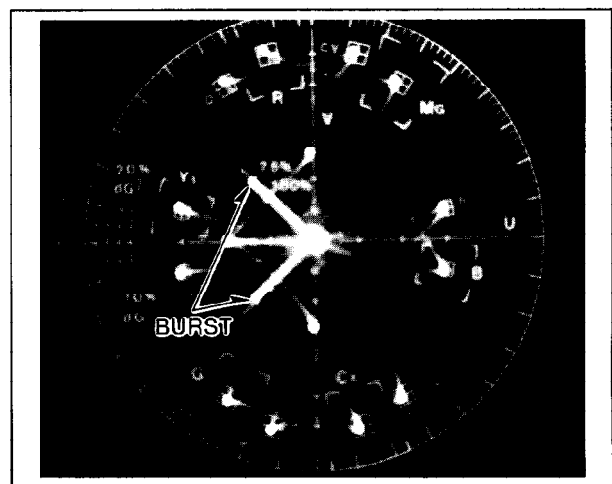


Fig. E29

**NOTE:**

Confirm TBC R-Y LEVEL AND TBC DIGITAL CHROMINANCE LEVEL Adjustments mutually when them adjust.

**2-3-23. TBC PLAYBACK LEVEL ADJUSTMENT (NV-FS200EG ONLY)**

TP	ADJ.	MODE	INPUT
P9001-1	VR9007	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLOSCOPE	100+ -2.5%	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 3 and Pin 1 of P9001.
4. Reading the playback level to Pin 3 of P9001.
5. Adjust VR9007 so that the level of Pin 3 of P9001 and Pin 1 of P9001 to be 100+ -2.5%.

**TIMER Section**

**2-3-24. TIMER CLOCK ADJUSTMENT**

TP	ADJ.	MODE	INPUT
TP7501	C7511		
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	7812.5+ -0.015µsec	

1. Connect the frequency counter to TP7501.
2. Adjust C7511 for 7812.5+ -0.015us.

**NORMAL AUDIO Section**

**2-3-25. AUDIO BIAS CURRENT ADJUSTMENT**

TP	ADJ.	MODE	INPUT
TP4002 (+) TP4003 (-)	VR4001	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M.	2.3+ -0.1mVrms	

1. Connect the V.T.V.M. to TP4002 (+) and TP4003 (-). (Do not ude long cable for Connection)
2. Make a short circuit between terminal of audio input and GND.
3. Place the Unit in Recording mode.
4. Adjust VR4001 so that reading of V.T.V.M. becomes 2.3+ -0.1mVrms.

**Hi-Fi AUDIO Section**

**2-3-26. AUDIO PLAYBACK LEVEL ADJUSTMENT**

TP	ADJ.	MODE	INPUT
AV1 OUT	VR4501	STOP	1kHz, -10dB SINEWAVE (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	SIGNAL GENERATOR/ V.T.V.M.	EE LEVEL= -8+ -0.5dB (380mVrms~420mVrms)	

1. Set the STEREO Mode.
2. Adjust VR4512 so that the level of the (L)CH to be E-E level -8+ -0.5dB(380~420mVrms).

**NOTE:**

Before this adjustment, "Tape Interchangeability Adjustment" and "Audio Bias Current Adjustment" must be completed.

**2-3-27. Hi-Fi AUDIO CARRIER FREQUENCY ADJUSTMENT**

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4551 (PAL-L) VR4552 (PAL-R) VR4501 (NTSC-L) VR4509 (NTSC-R)	RECORDING (SP MODE)	
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	PAL-L: 1400+ -3kHz PAL-R: 1800+ -3kHz NTSC-L: 1300+ -3kHz NTSC-R: 1700+ -3kHz	

1. Connect the GND to Pin 47 of IC6001 (compulsory NTSC mode).
2. Recording the unit in SP mode.
3. Connect the frequency couter to Pin 34 of IC4501.
4. Adjust VR4501 so that the frequency to be 1300+ -3KHz.
5. Connect the frequency counter to Pin 47 of IC4501.
6. Adjust VR4509 so that the frequency to be 1700+ -3KHz.

7. Disconnect the GND to Pin 47 of IC6001.
8. Recording unit in SP mode.
9. Connect the frequency counter to Pin 34 of IC4501.
10. Adjust VR4551 so that the frequency to be 1400±3KHz.
11. Connect the frequency counter to Pin 47 of IC4501.
12. Adjust VR4552 so that the frequency to be 1800±3KHz.

2-3-28. AUDIO DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 AND R4511 (L) BETWEEN VR4507 AND R4561 (R)	VR4502 (L) VR4507 (R)	RECORDING (SP MODE)	1kHz, -10dB (316mVp-p) (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M.	120mVrms	

1. Set the output level of the Signal Generator to 1KHz/-10dB and supply it to both Audio Input terminals (L) and (R).
2. Adjust the recording level (Audio output) with Hi-Fi Rec Level VR on the Front Panel so that the audio outputs are 400mVrms (V.T.V.M.) at both Audio Output terminals (L) and (R).
3. Connect the V.T.V.M. between VR4502 and R4511
4. Adjust VR4502 so that the level becomes 120mVrms.
5. Connect the V.T.V.M. between VR4507 and R4561
6. Adjust VR4507 so that the level becomes 120mVrms.

2-3-29. FM BPF LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (L) IC4501-48 (R)	VR4550	PLAYBACK	1.608MHz 400mVp-p (PS4003-8)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	SIGNAL GENERATOR/ D.V.M.	L CH = R CH	

1. Remove the P551.
2. Record the no signal with SP mode.
3. Set the output of the signal generator to 1.608MHz and 400mVp-p, and supply it to Pin 8 of PS4003.
4. Connect the D.V.M. to the Pin 33 and Pin 48 of IC4501.
5. Play back the just recorded portion.
6. Adjust VR4550 so that the (L)CH level and (R)CH level is the same level.

2-3-30. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
LEVEL METER	VR7501	STOP	1kHz, -10dB (AV1 IN)
TAPE	M. EQ.	SPEC.	
X	SIGNAL GENERATOR	0dB INDICATOR JUST LIGHT UP	

1. Set the Audio Playback Mode Selector to STEREO position by infrared remotecontroller. (Both the Left and Right Indicators are lit.
2. Set the Audio recording SW to MANUAL. Next Adjust the output level with the Audio Rec Level Controls so that the audio outputs are 400mVrms at both Output Jacks (L) and (R).
3. Adjust VR7501 so that the 0dB indicator just lights up on the level meter as shown in Fig.E30.

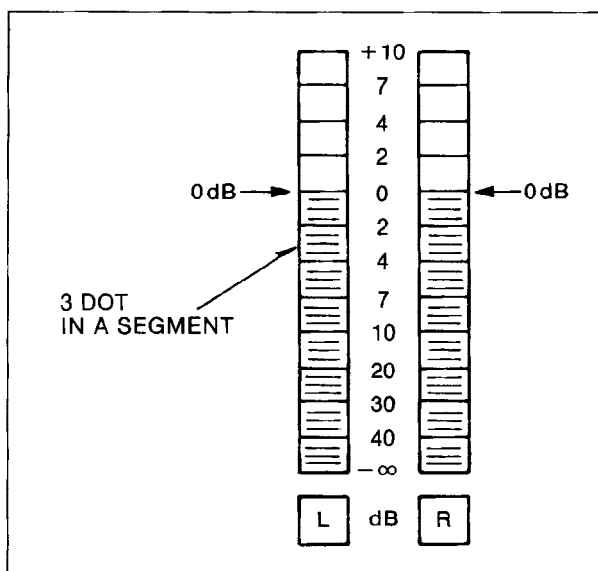


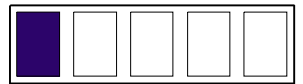
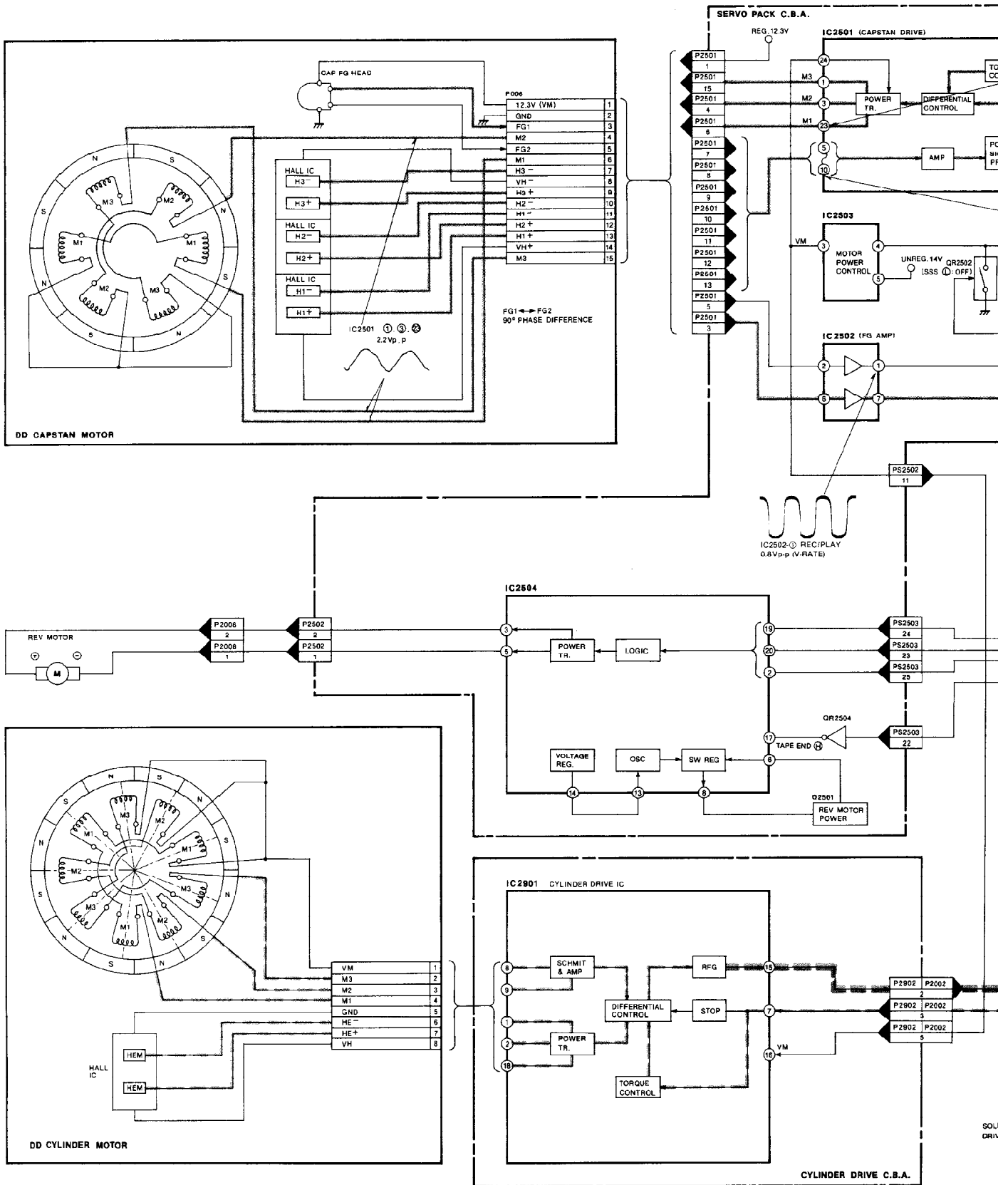
Fig. E30



# SECTION 3

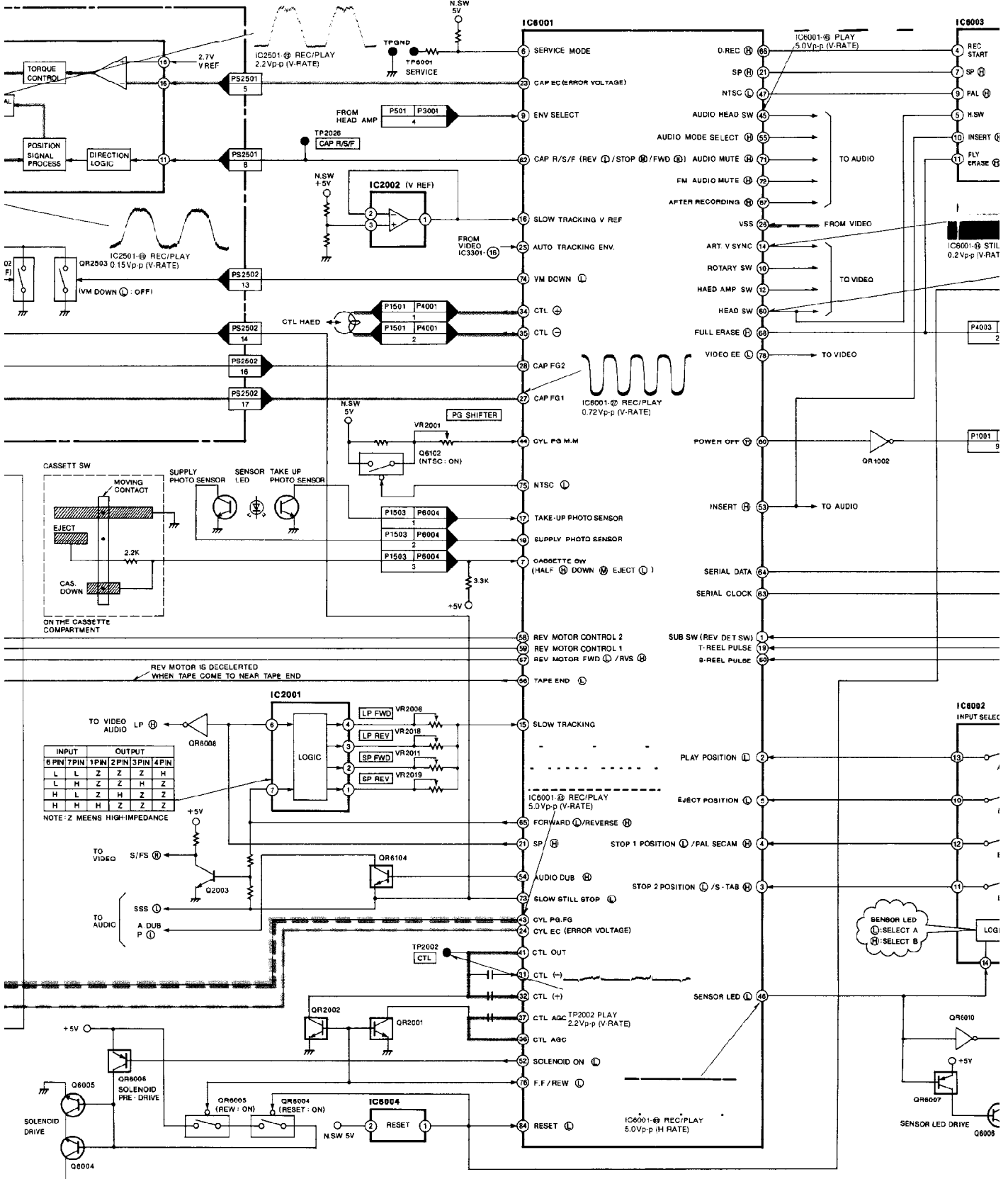
## BLOCK DIAGRAMS

### 3-1. SYSTEM CONTROL & SERVO BLOCK DIAGRAM



**CAPSTAN SERVO SPEED LOOP  
CAPSTAN SERVO PHASE LOOP**

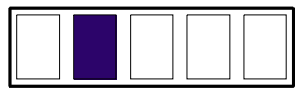
**CYLINDER SERVO SPEED LOOP  
CYLINDER SERVO PHASE LOOP**

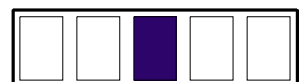
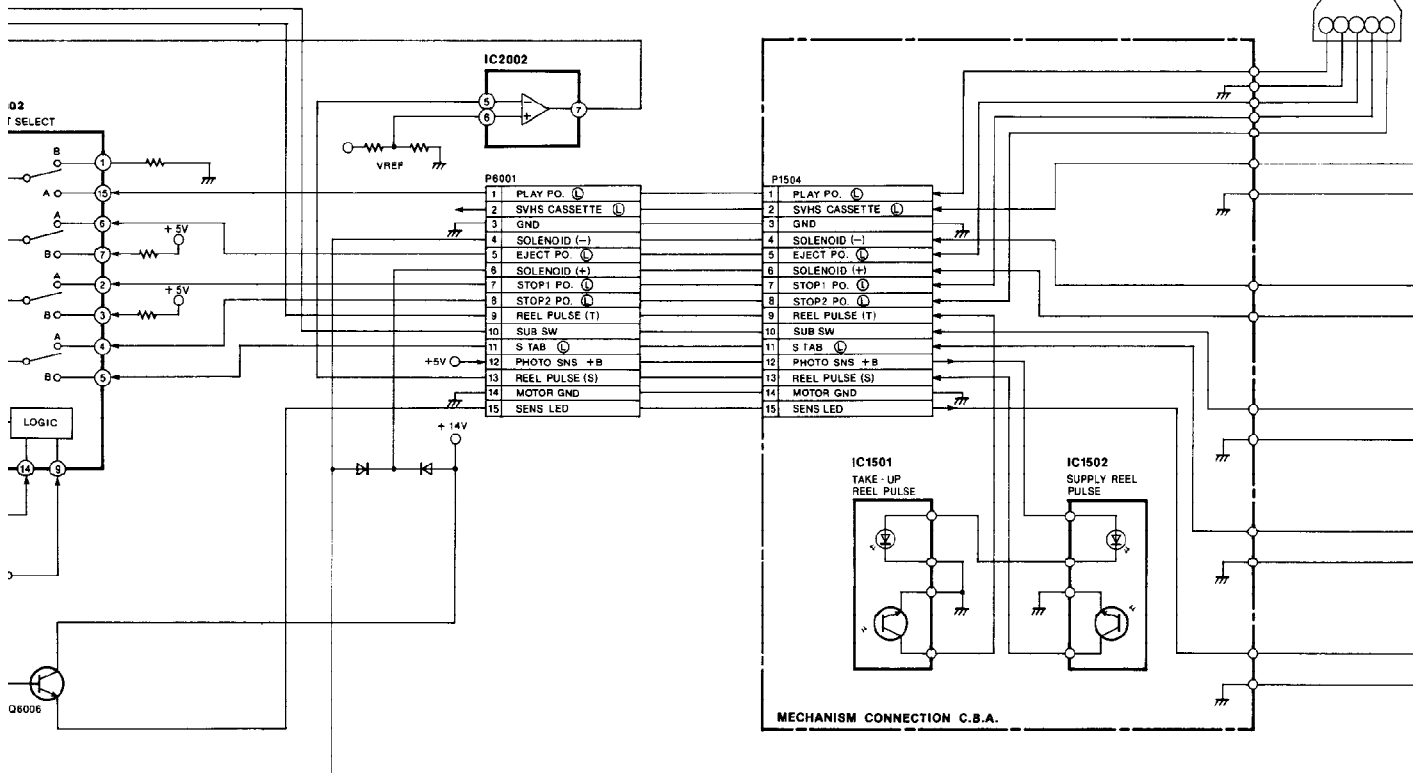
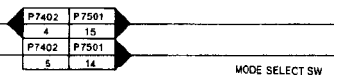
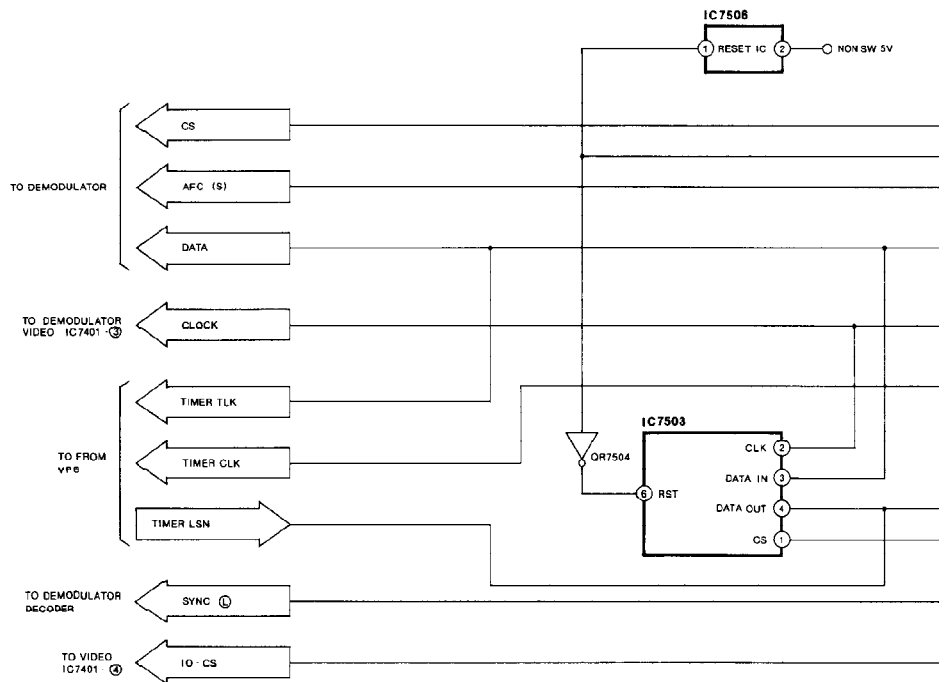
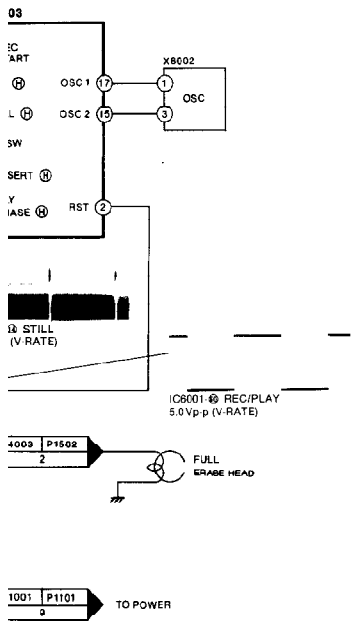


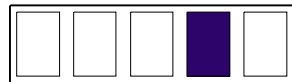
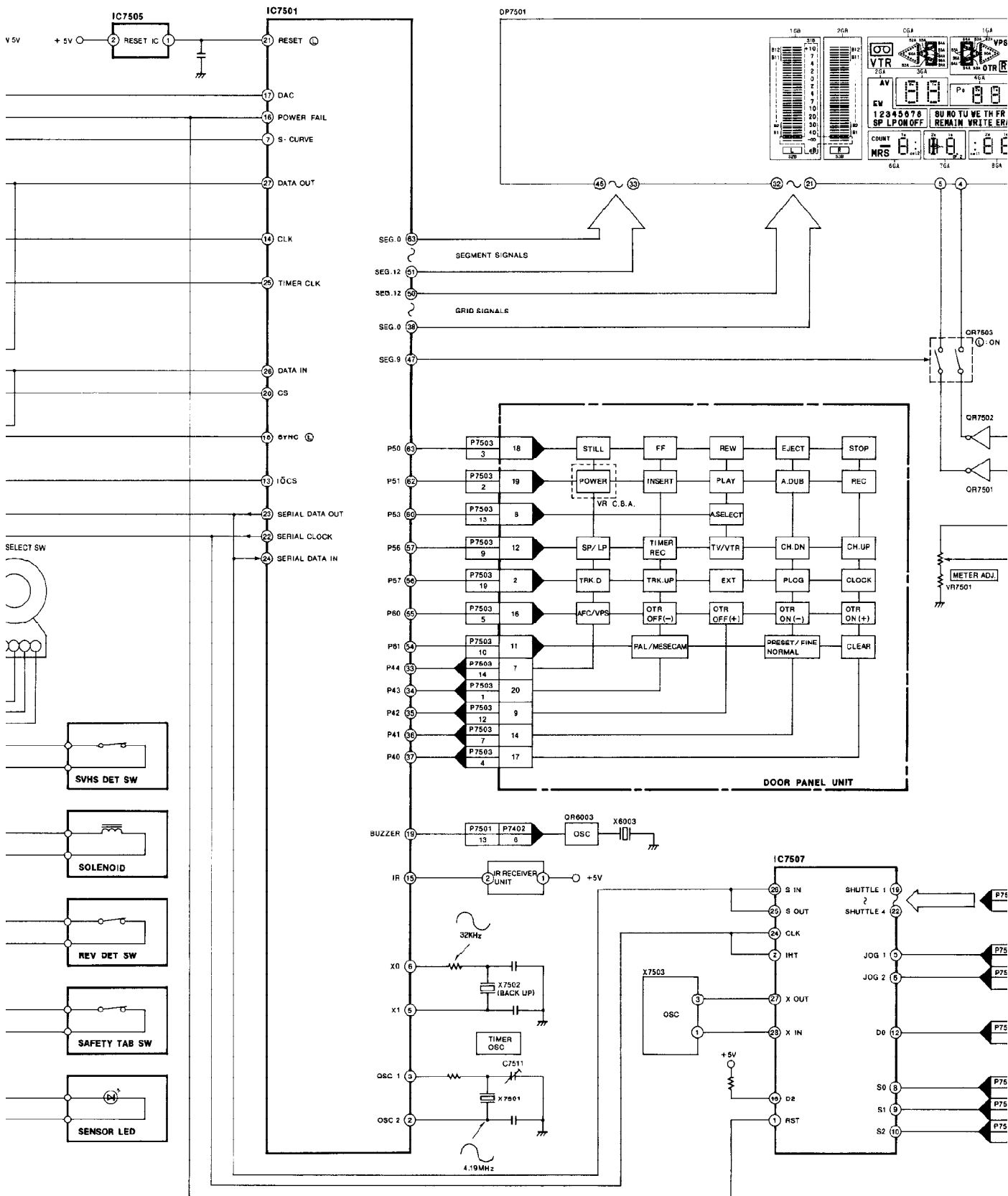
INPUT	OUTPUT				
6 PIN	7 PIN	1 PIN	2 PIN	3 PIN	4 PIN
L	L	Z	Z	Z	H
L	H	Z	Z	H	Z
H	L	Z	H	Z	Z
H	H	H	Z	Z	Z

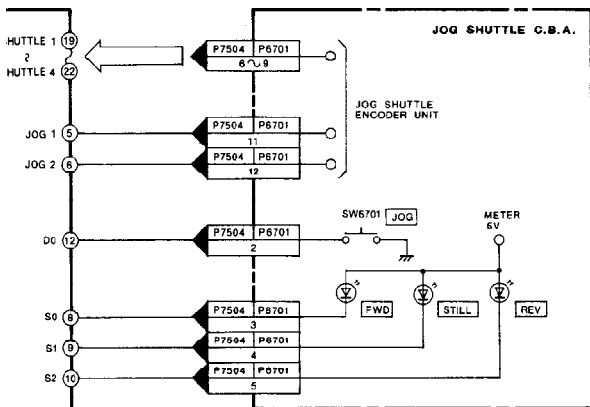
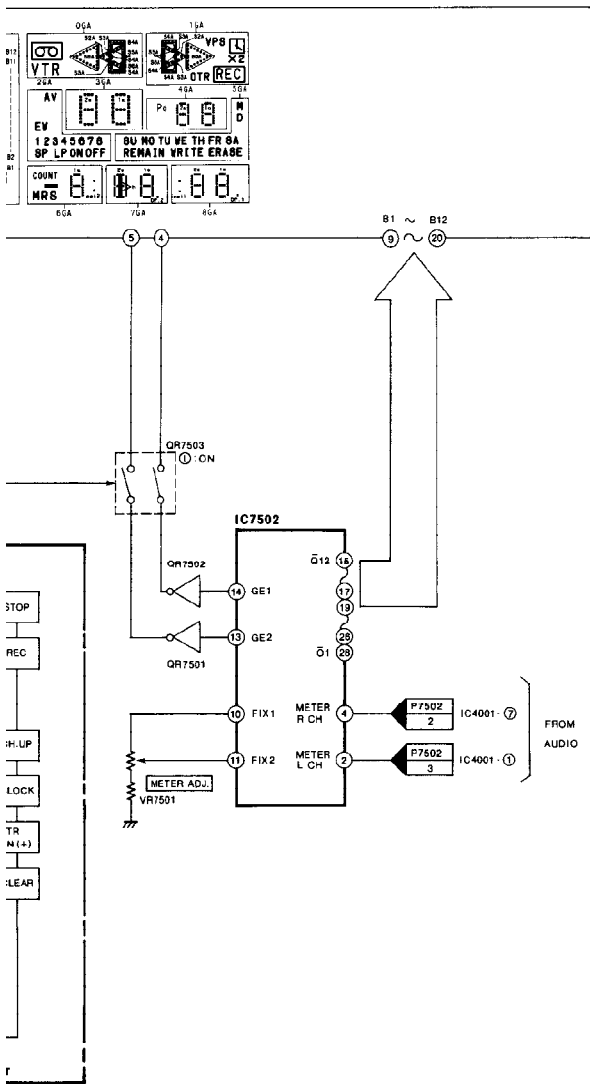
NOTE: Z MEANS HIGH-IMPEDANCE

SENSOR LED  
 ①-SELECT A  
 ②-SELECT B

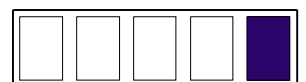




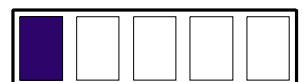
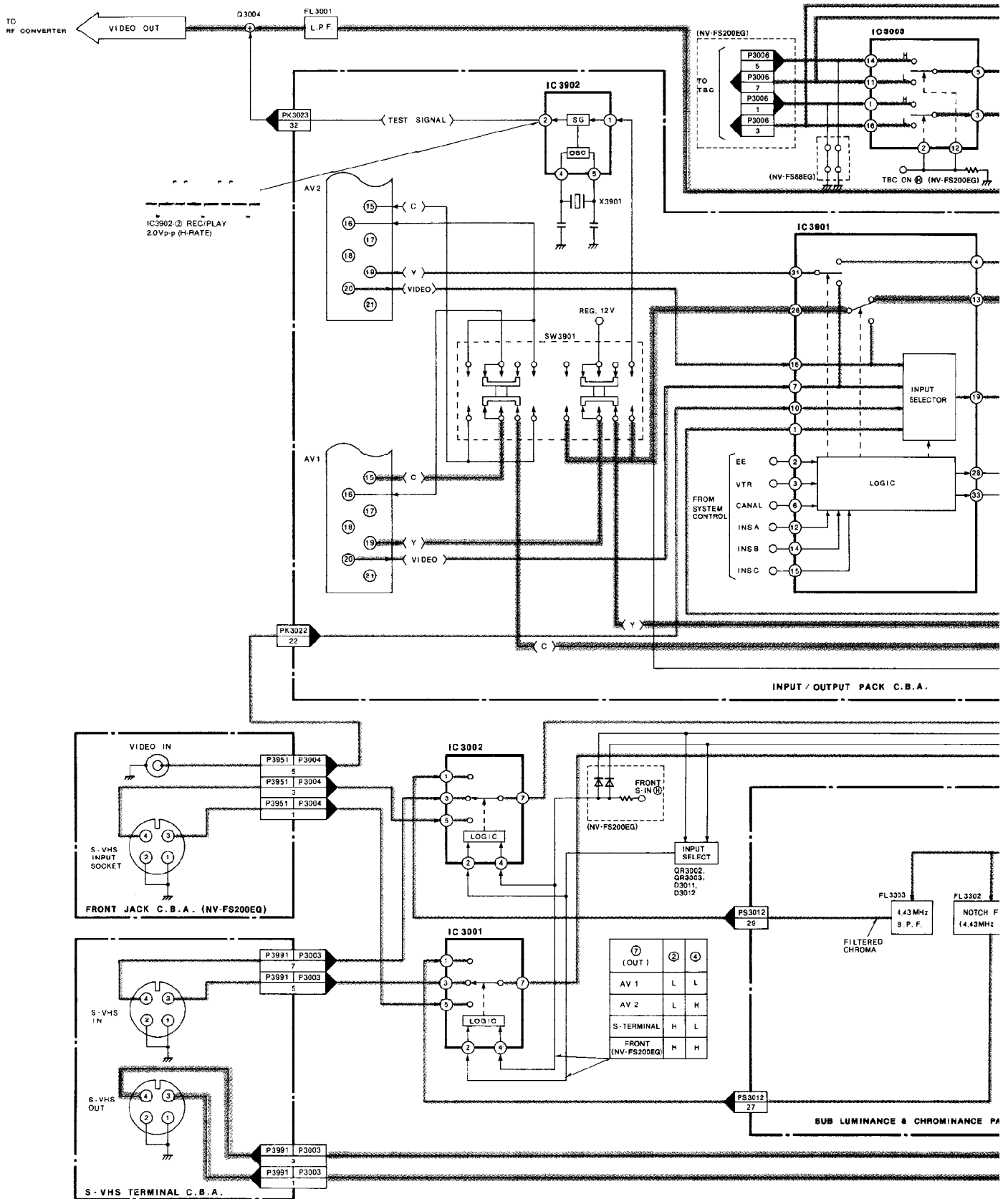




SYMBOL		TRUTH VALUE TABLE			
<b>INVERTER</b>					
(a)		(b)			
IN	(a)	H	L		
OUT	(b)	L	H		
<b>COMPARATOR</b>					
(a)		(c)			
IN	(a)	(a) > (b)	(a) < (b)		
OUT	(c)	H	L		
<b>AND CIRCUIT</b>					
(a)		(c)			
IN	(a)	L	L	H	H
OUT	(c)	L	L	L	H
<b>OR CIRCUIT</b>					
(a)		(c)			
IN	(a)	L	L	H	H
OUT	(c)	L	H	H	H
<b>THREE STATES BUFFER</b>					
(a)		(b)	(c)		
IN	(a)	H	L	H or L	
OUT	(c)	L	L	H	
※ High Impedance					
<b>TR. SW (NPN TYPE)</b>					
(C)		(B)	(E)		
BASE	H	L			
TR. SW	ON	OFF			
<b>TR. SW (PNP TYPE)</b>					
(E)		(B)	(C)		
BASE	H	L			
TR. SW	OFF	ON			
<b>R.S TYPE FLIP-FLOP</b>					
(a)		(c)	(d)		
IN	(a)	L	L	∩	
OUT	(c)	※	L	H	
※ Initial condition is maintained. ◆ Initial condition is reversed.					

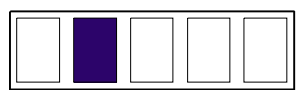
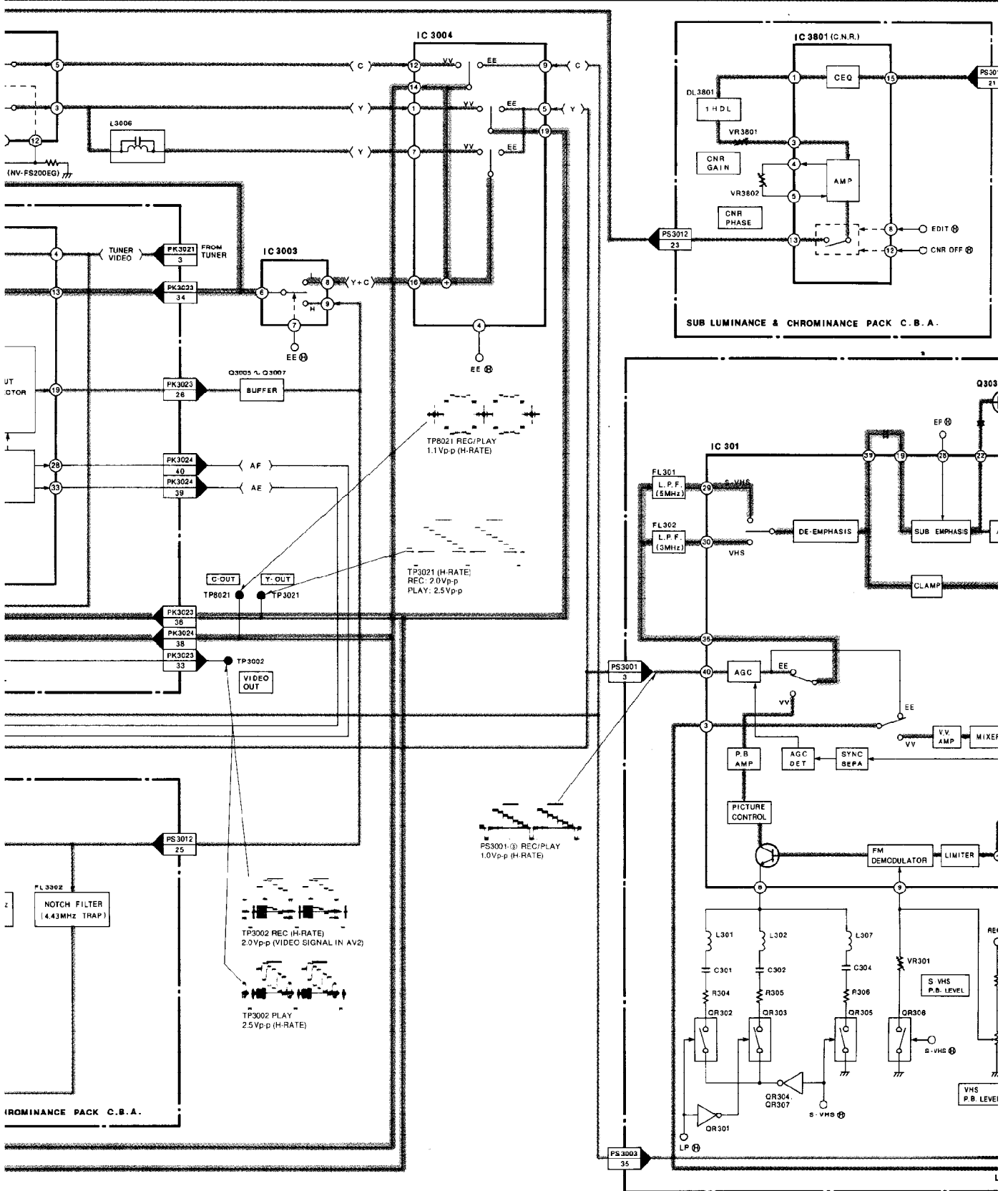


### 3-2. LUMINANCE & CHROMINANCE BLOCK DIAGRAM

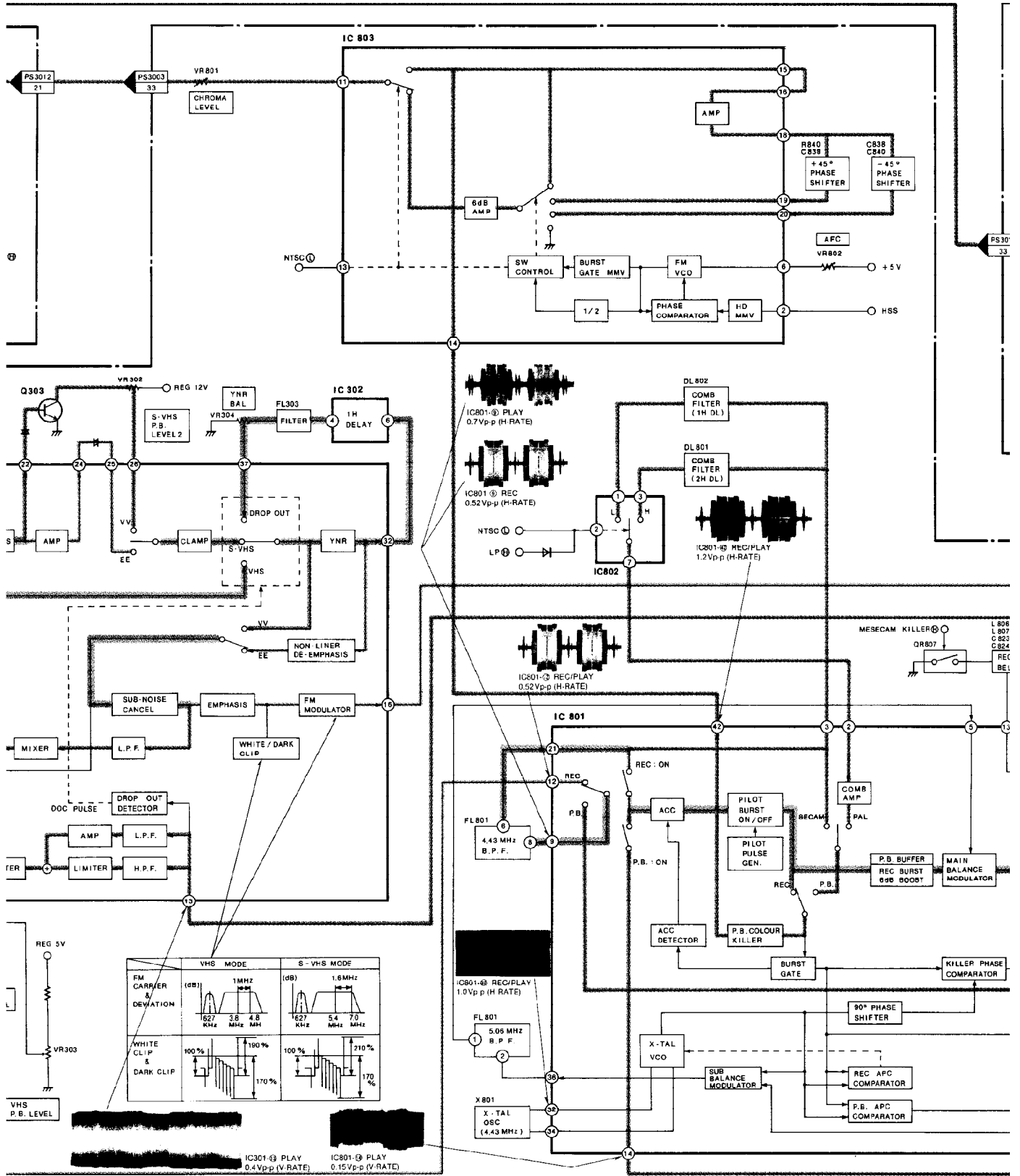


MAIN SIGNAL PATH IN REC MODE

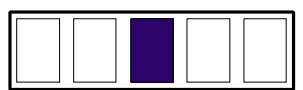
MAIN SIGNAL PATH IN PLAYB.



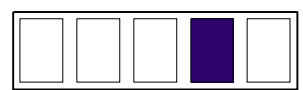
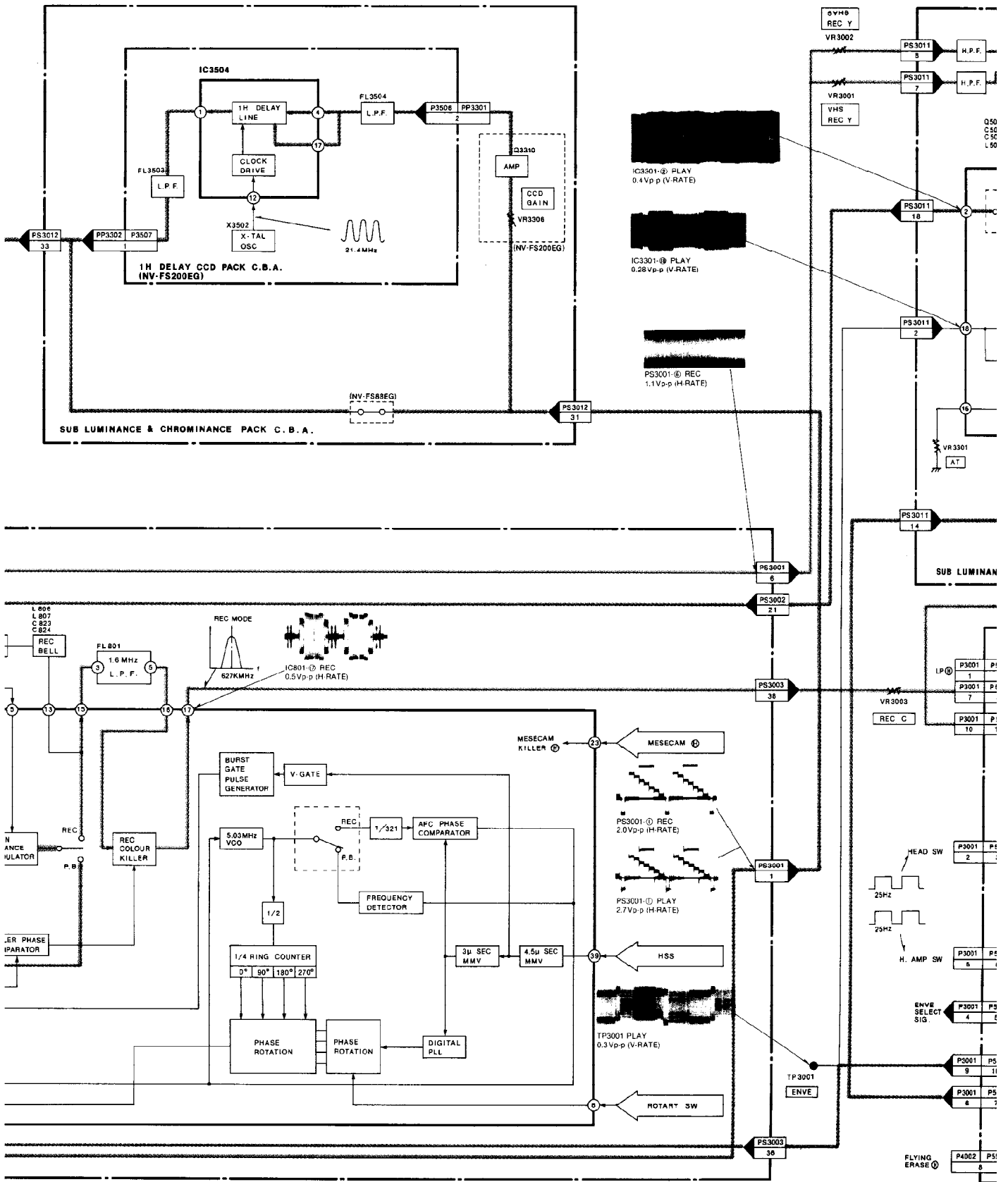
# PLAYBACK MODE

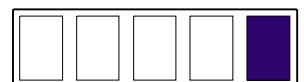
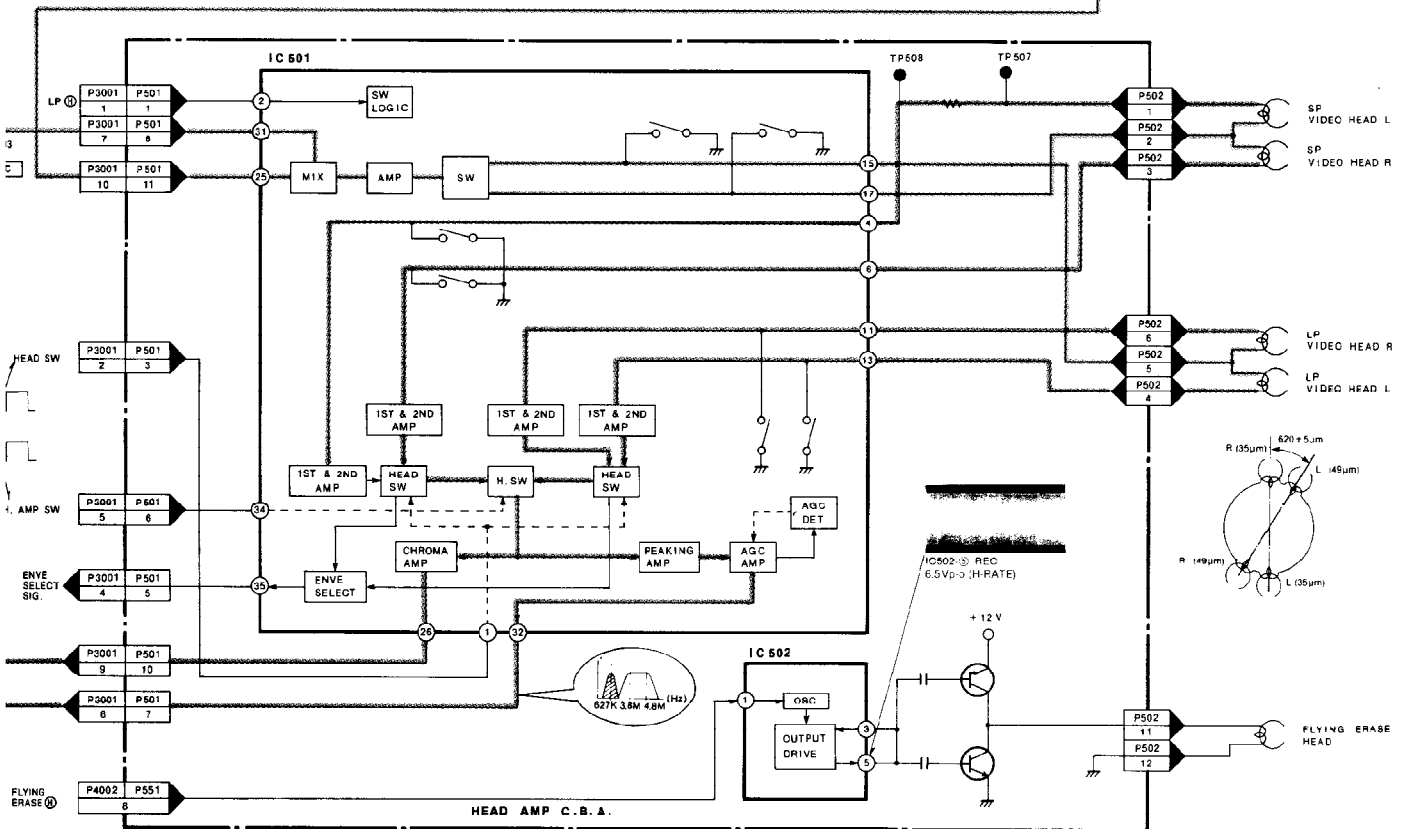
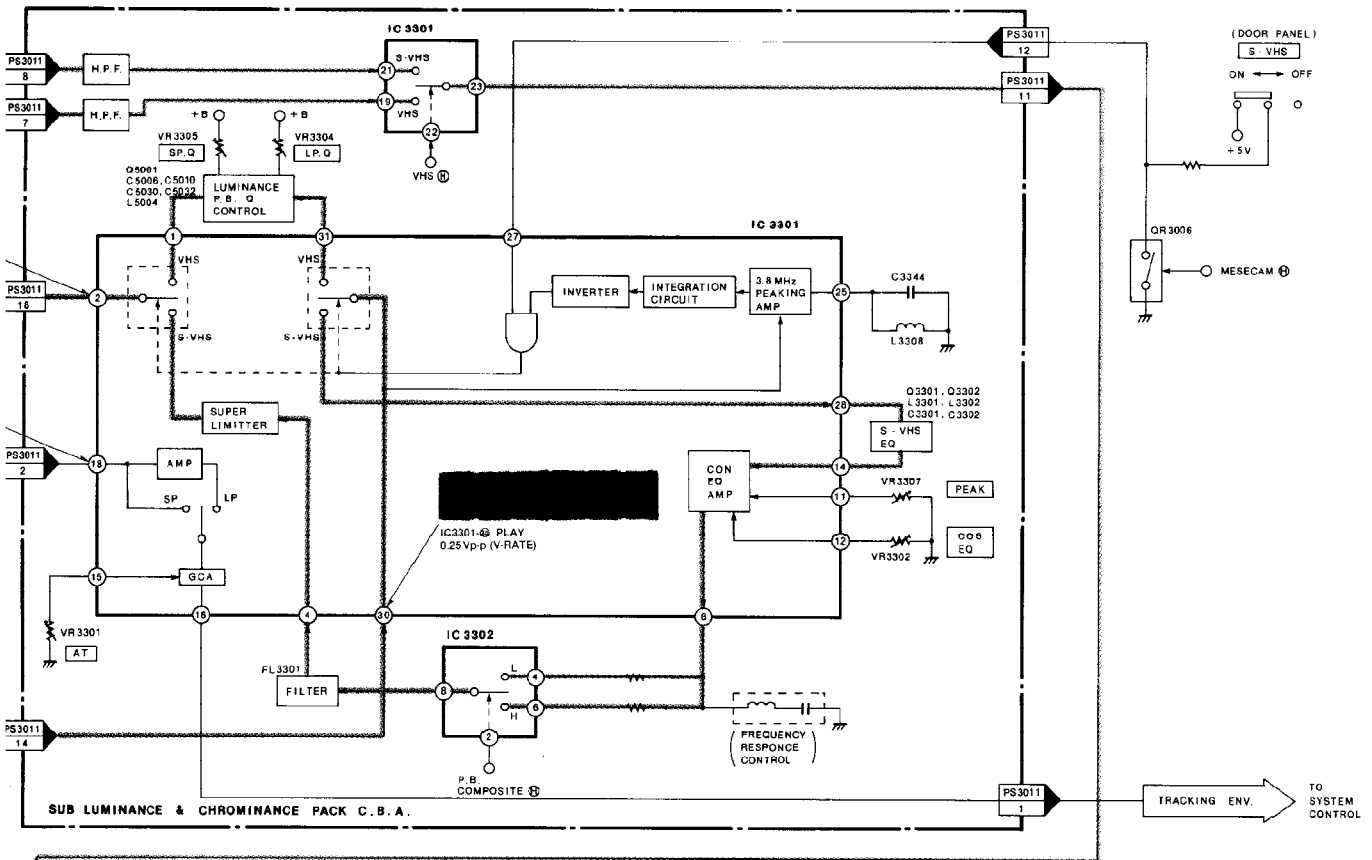


LUMINANCE & CHROMINANCE PACK C.B.A



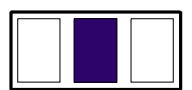
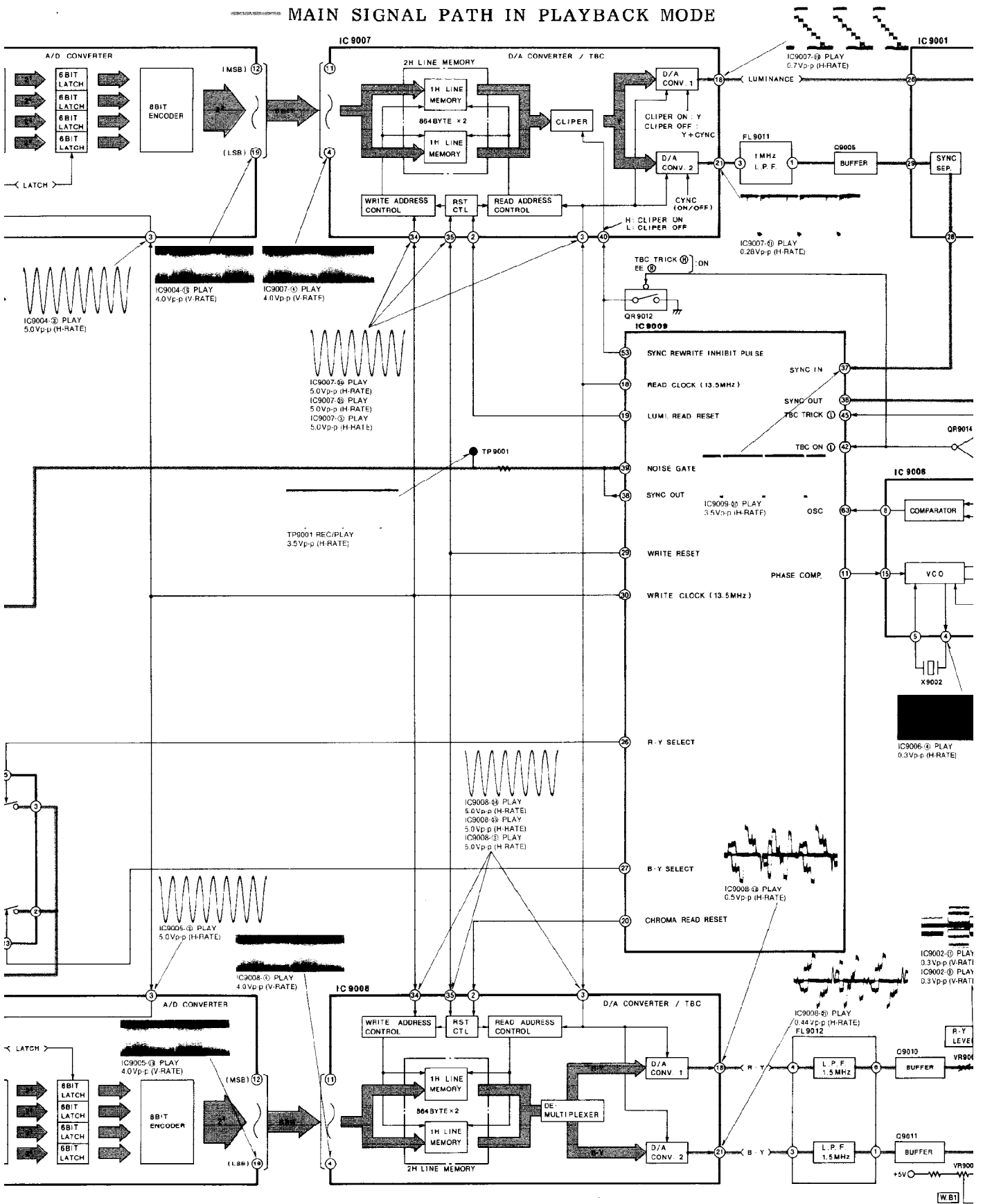


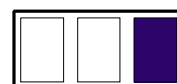
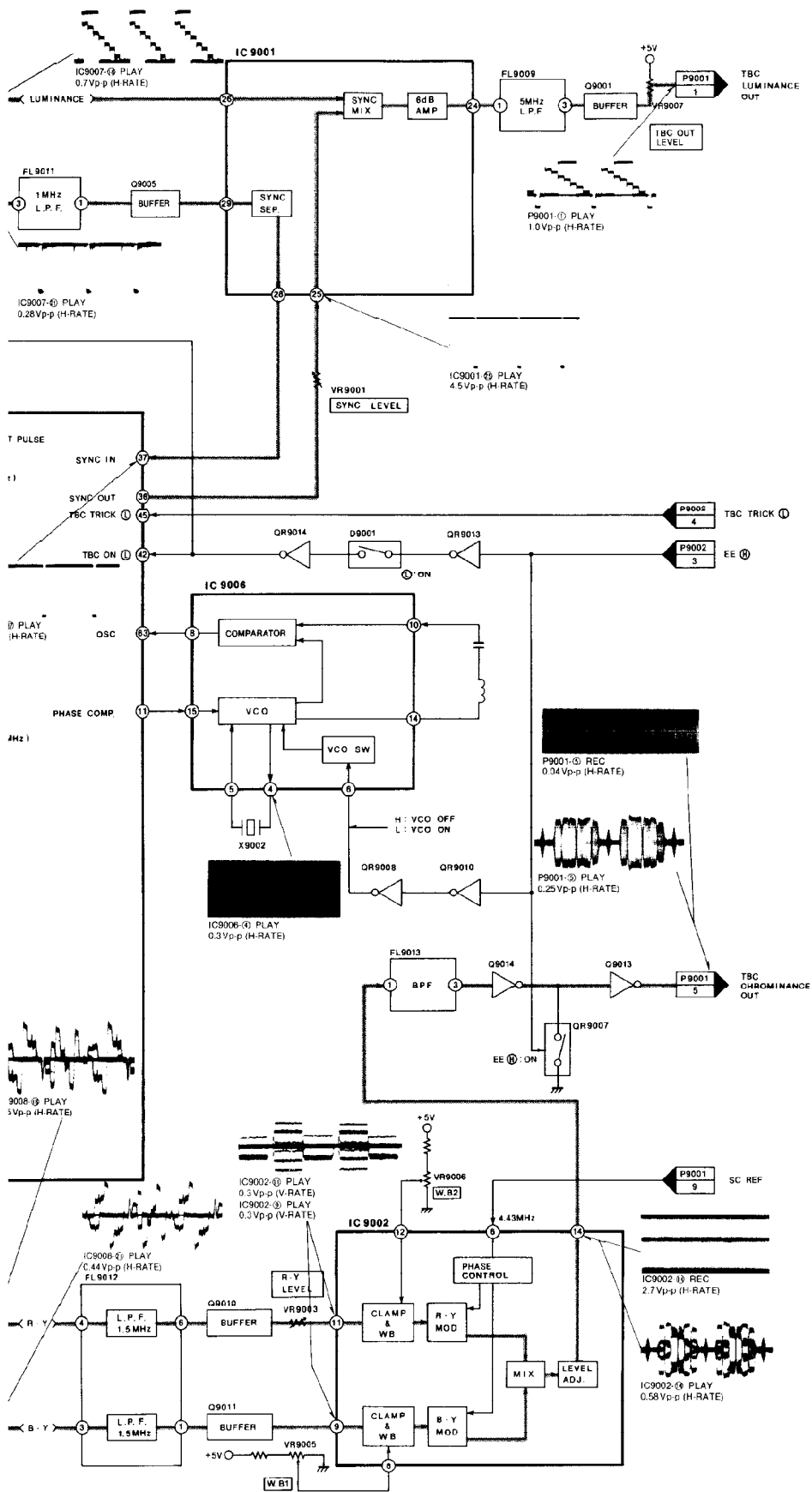






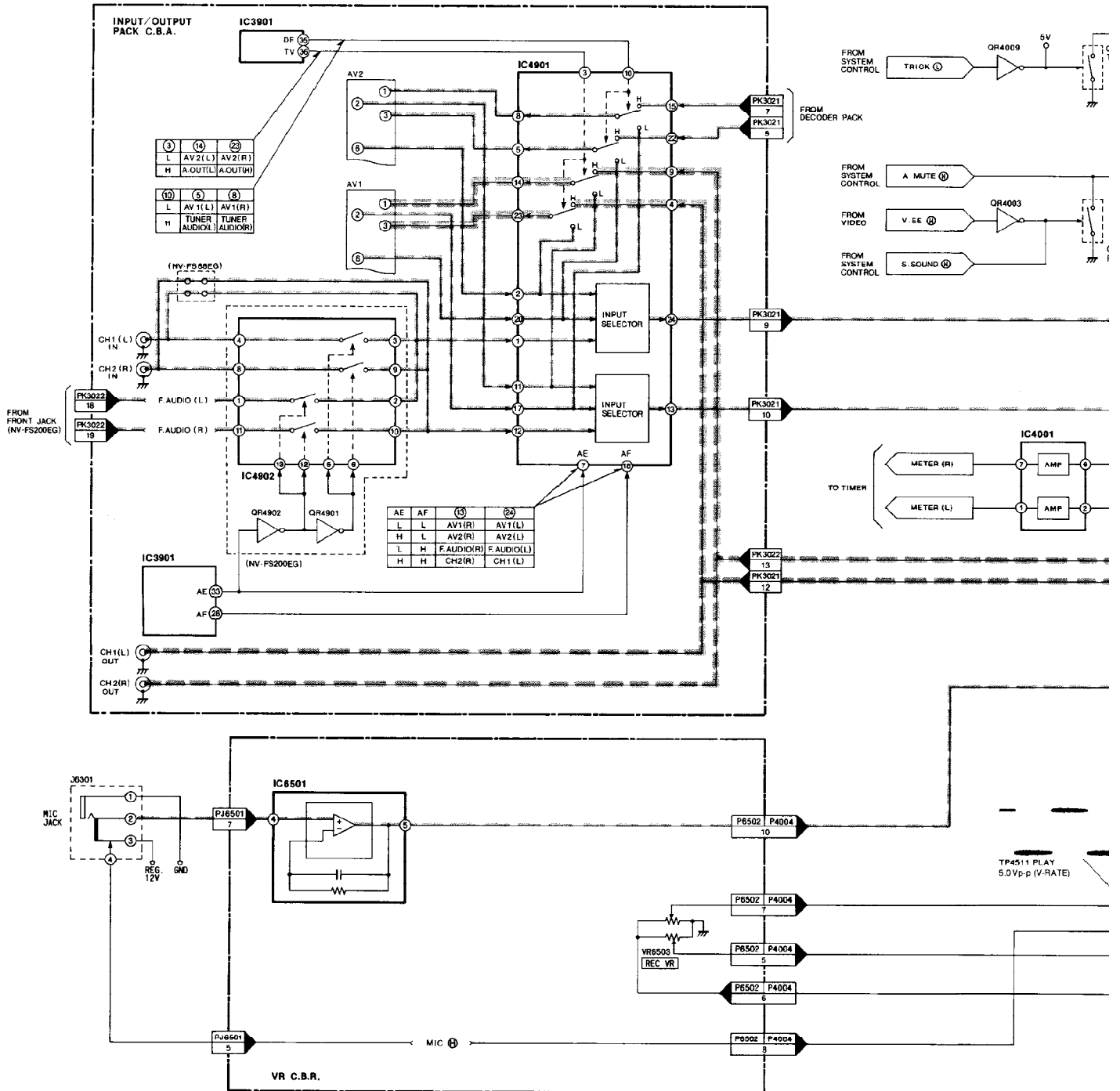
# MAIN SIGNAL PATH IN PLAYBACK MODE





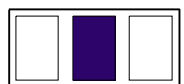
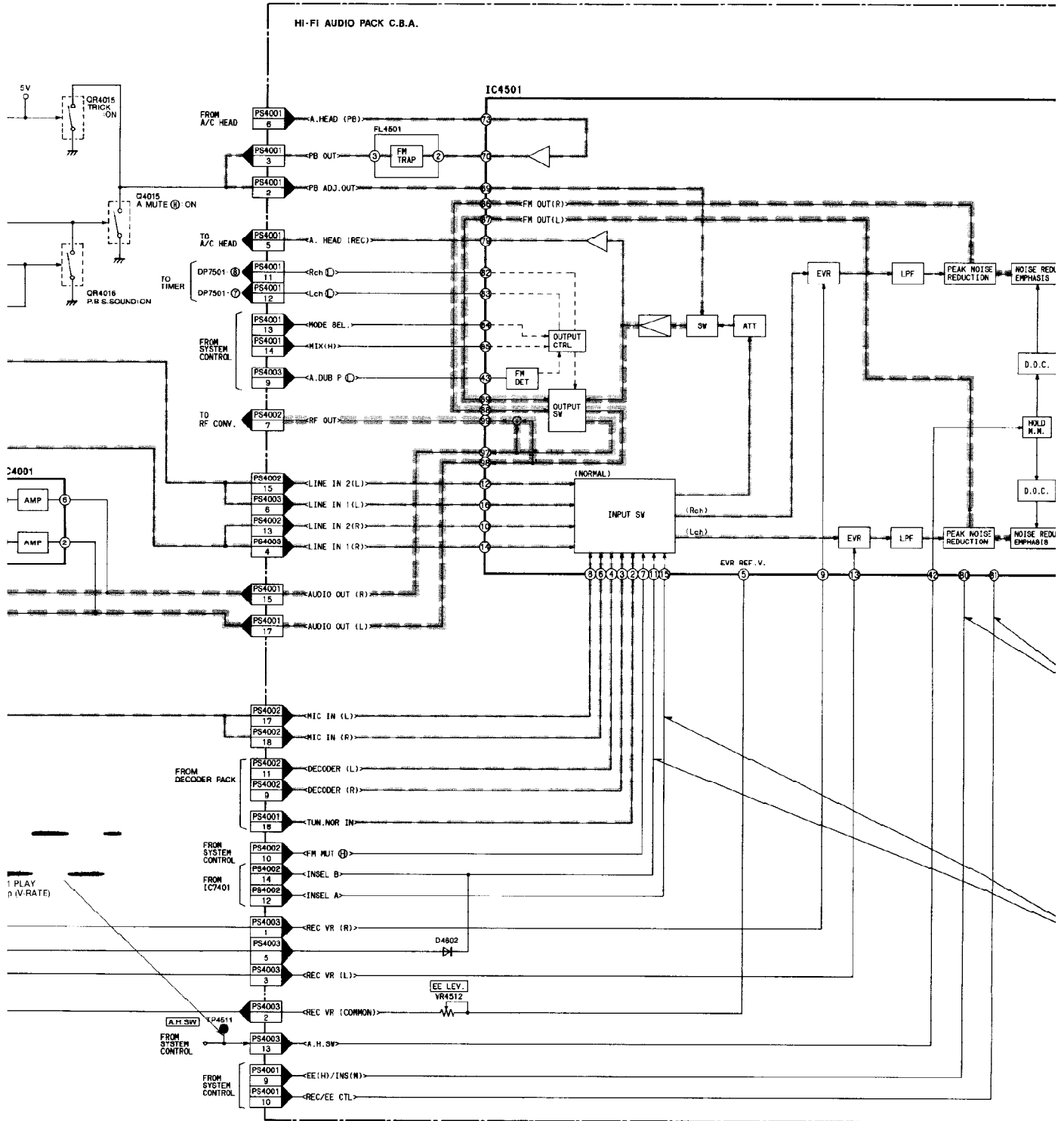
# 3-4. Hi-Fi AUDIO BLOCK DIAGRAM

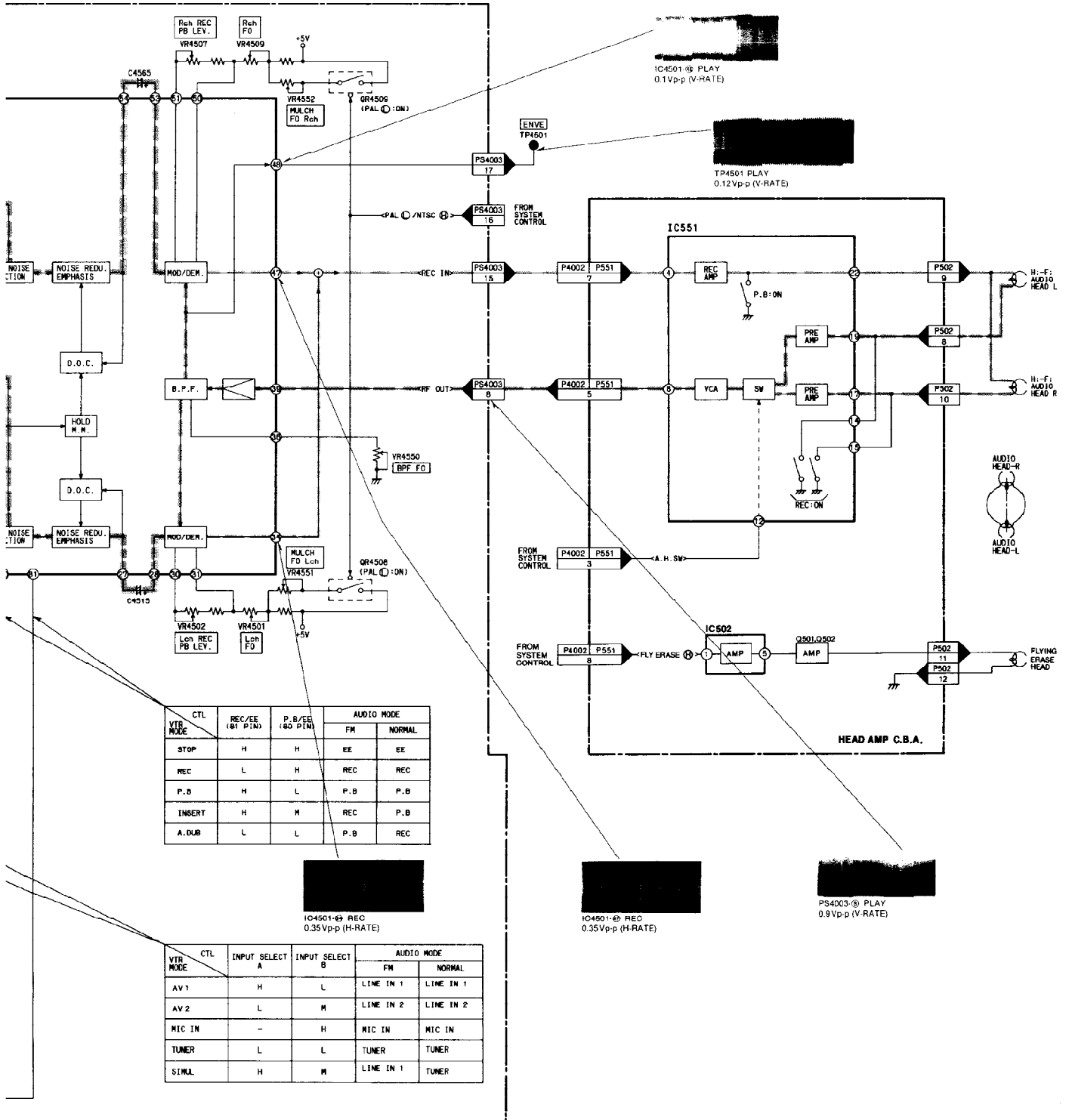
MAIN SIGNAL PAT



AL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE





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

VTR MODE	CTL	INPUT SELECT		AUDIO MODE	
		A	B	FM	NORMAL
AV 1		H	L	LINE IN 1	LINE IN 1
AV 2		L	H	LINE IN 2	LINE IN 2
MIC IN		-	H	MIC IN	MIC IN
TUNER		L	L	TUNER	TUNER
SIMUL		H	H	LINE IN 1	TUNER

IC4501-⊕ REC  
0.35Vp-p (H-RATE)

IC4501-⊕ REC  
0.35Vp-p (H-RATE)

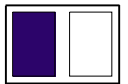
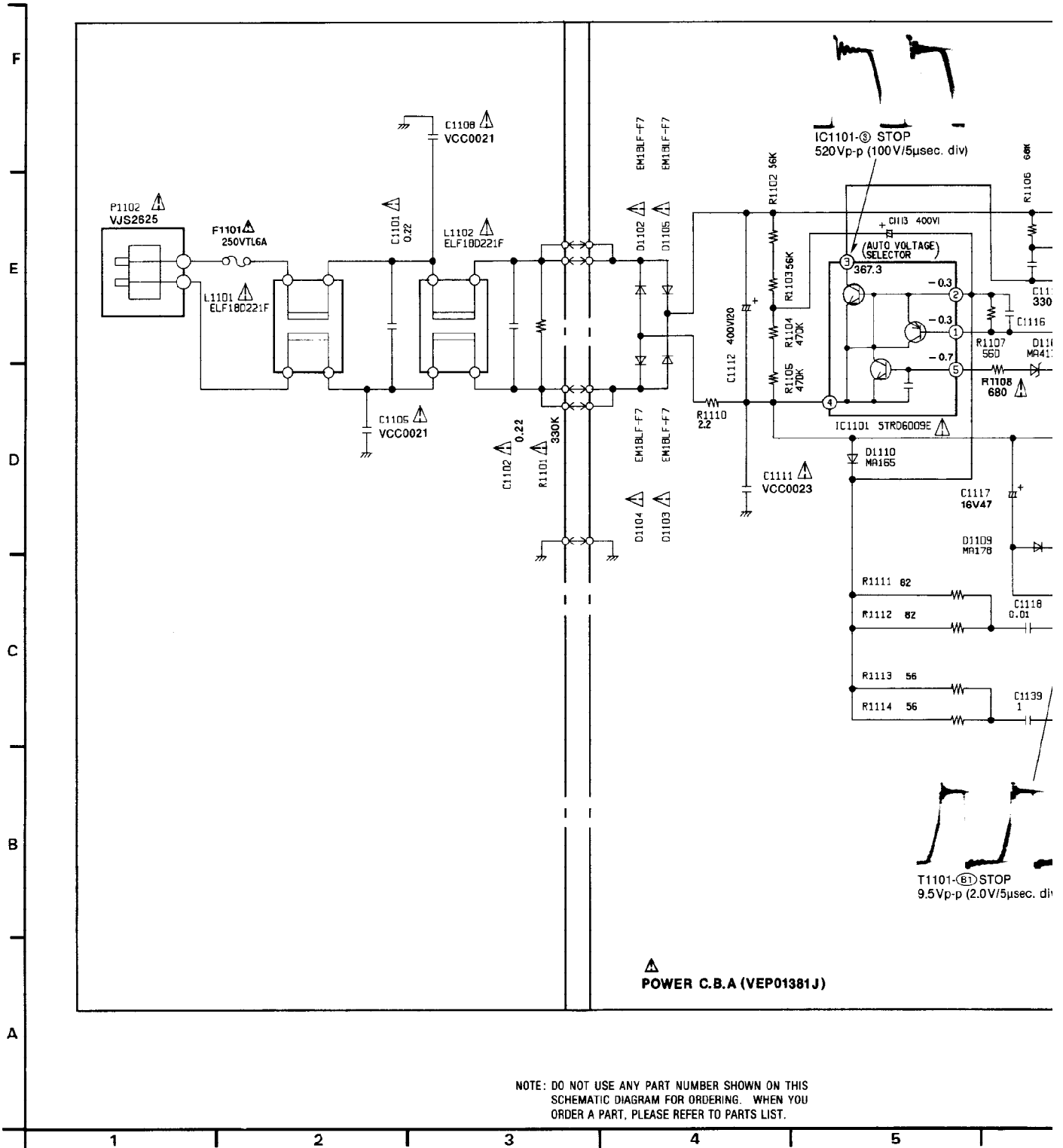
PS4003-⊕ PLAY  
0.9Vp-p (V-RATE)

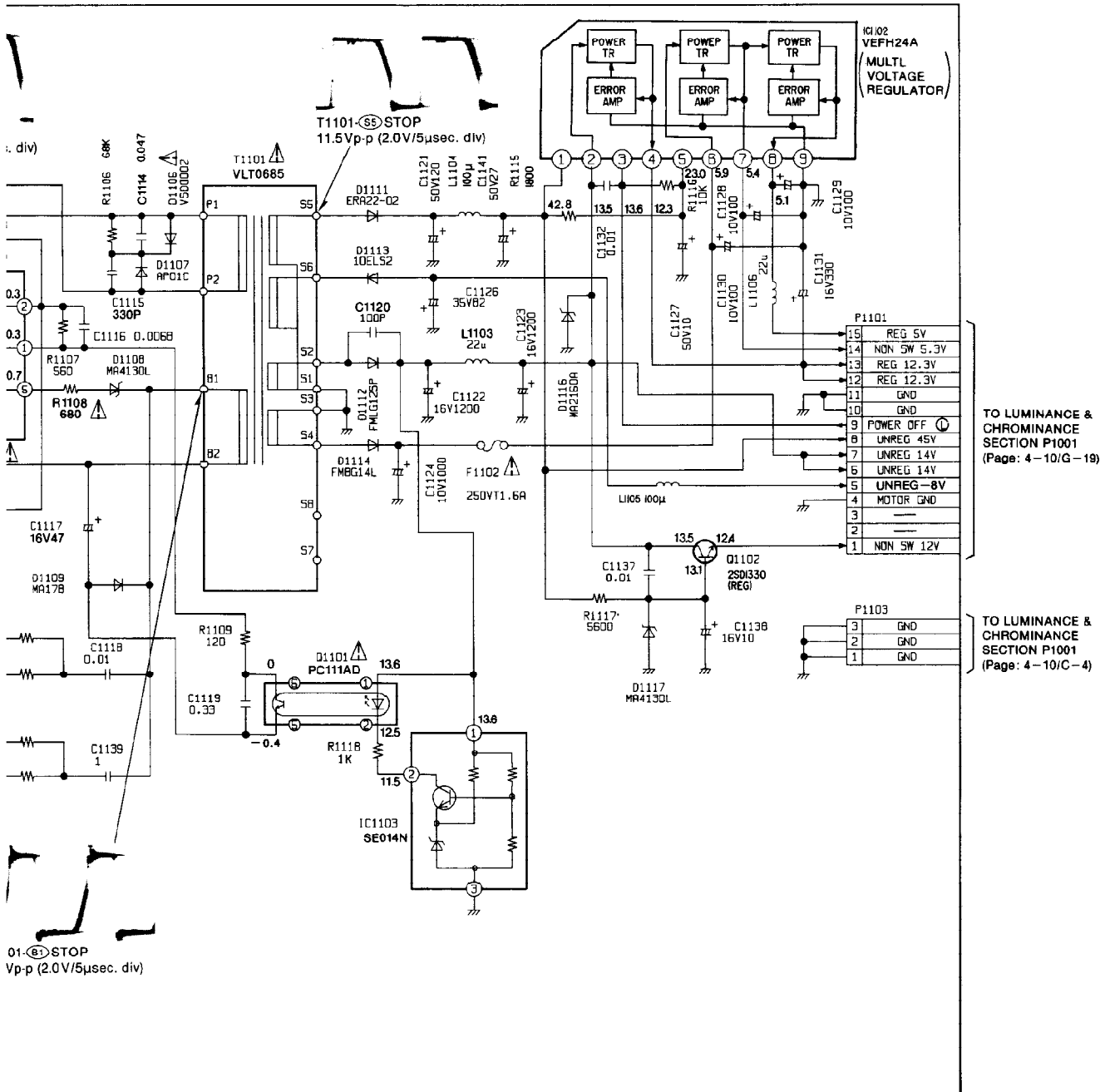




# SECTION 4 SCHEMATIC DIAGRAM

## 4-1. POWER SCHEMATIC DIAGRAM



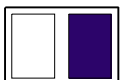


**IMPORTANT SAFETY NOTICE:**  
COMPONENTS IDENTIFIED BY THE SIGN  $\Delta$  HAVE SPECIAL CHARACTERISTICS  
IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

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

PRIMARY SIDE . . . . . IC1101-(4)  
SECONDARY SIDE . . . TP GND OF MAIN C.B.A.

NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.



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

REF. NO.	IC2001								IC2002											
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8				
STOP 2	2.4	4.9	0	0	0	5.0	0	5.0	2.5	2.5	2.5	0	2.4	4.3	3.8	5.0				
PLAY	2.4	4.9	0	0	0	5.0	0	5.0	2.5	2.5	2.5	0	2.4	4.2	3.8	5.0				
REC	2.4	4.9	0	0	0	5.0	0	5.0	2.5	2.5	2.5	0	2.5	4.2	3.8	4.9				
F.F.	2.4	4.9	0	0	0	5.0	0	5.0	2.5	2.5	2.5	0	2.5	2.0	2.5	5.0				
REW	2.4	4.9	0.1	0	0	5.0	0	5.0	2.5	2.5	2.5	0	2.5	1.8	2.5	5.0				
REF. NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP 2	0	0	0	0	0	5.0	0	1.7	1.7	1.3	1.1	0.3	0	5.0						
PLAY	0	0	0	0	0	5.0	0	3.3	3.3	3.3	2.7	0.3	0	5.0						
REC	0	0	0	0	0	5.0	0	0.9	0.9	0.9	0.2	0.3	0	5.0						
F.F.	0	0	0	0	0	5.0	0	1.2	1.2	1.2	0.6	0.3	0	5.0						
REW	0	0	0	0	0	5.0	0	1.2	1.2	1.2	0.6	0.3	0	5.0						
REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP 2	11.7	11.7	0.1	1.2	0	2.5	2.4	2.5	2.4	2.6	5.0	3.6	3.7	3.8	0.8	12.0	11.7	0.1		
PLAY	10.0	10.0	0.1	1.1	0	2.5	2.4	2.5	2.4	2.6	5.0	3.7	3.7	0	1.1	10.5	10.0	0.1		
REC	10.0	10.0	0.1	1.2	0	2.5	2.4	2.5	2.4	2.6	5.0	3.8	3.8	3.7	1.1	10.5	10.0	0.1		
F.F.	13.4	13.4	0	0.1	0	2.5	4.2	2.4	2.5	1.3	5.0	4.1	4.1	3.8	5.0	13.3	13.4	0		
REW	13.4	13.4	0	0.1	0	2.5	4.2	2.4	2.5	1.3	5.0	4.1	4.1	3.8	5.0	13.3	13.4	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 2	0	0	0.3	5.0	5.0	5.0	2.0	0	0	4.4	5.0	0	0	0	0	2.5	0	3.2	0	0
PLAY	0	0	0.3	5.0	5.0	5.0	2.0	0	3.9	3.7	5.0	0	0	0	0	2.5	3.2	3.2	4.8	0
REC	0	0	0.3	5.0	5.0	5.0	2.0	0	4.5	3.0	5.0	0	0	0	0	2.5	3.2	3.2	4.9	0
F.F.	0	0.5	0.5	4.7	5.0	5.0	2.0	0	0.1	5.0	5.0	0	0	0.1	0	2.5	3.2	3.2	1.8	0
REW	0	0.5	0.5	4.7	5.0	5.0	2.0	0	0	5.0	5.0	0	0	0	0	2.5	3.2	3.2	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 2	5.0	5.0	0.1	2.4	1.7	2.5	2.4	2.4	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.4
PLAY	5.0	5.0	2.4	2.4	3.3	2.5	2.5	2.4	0	2.5	2.5	2.5	4.9	0	0	0	2.5	2.5	0	2.7
REC	5.0	5.0	2.5	2.4	0.9	2.4	2.4	2.4	0	2.5	0	2.6	4.9	2.3	2.7	0	2.5	2.5	0	0
F.F.	5.0	5.0	2.5	4.2	1.2	2.5	2.5	2.4	0	2.5	2.5	2.6	4.9	2.0	0	0	2.5	2.5	0	2.2
REW	5.0	5.0	2.4	4.2	1.2	2.5	2.4	2.4	0	2.5	2.5	2.6	4.9	0	0	0	2.5	2.5	0	2.8
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	2.4	5.0	1.1	2.8	0	4.7	4.9	5.0	0	3.8	4.0	5.0	0	0	5.0	5.0	0	0	0	4.3
PLAY	2.4	5.0	1.3	2.4	2.9	4.7	5.0	5.0	0	3.8	4.4	5.0	0	0	5.0	5.0	0	0	0	5.0
REC	0	0	1.1	2.5	0	4.7	4.9	5.0	0	3.8	3.7	5.0	0	0	5.0	5.0	0	0	0	3.0
F.F.	2.4	5.0	4.9	0	0	4.4	5.0	5.0	0	2.2	3.9	5.0	0	0	5.0	5.0	0	0	0.1	0
REW	2.4	5.0	4.9	0	0	4.4	5.0	5.0	0	2.7	4.4	5.0	0	0	5.0	5.0	0	0	0	0
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 2	5.0	2.0	4.2	4.2	0	0	0	0	0	0	0	0	0	4.9	4.9	4.9	5.0	0	5.0	0
PLAY	5.0	0	4.2	4.0	0	0	0	0	0	5.0	0	0	5.0	0	4.9	4.9	0	5.0	5.0	0
REC	5.0	0	4.2	0	0	5.0	4.9	4.9	4.9	5.0	0	0	5.0	0	4.9	4.9	5.0	0	5.0	0
F.F.	5.0	0	4.2	4.4	0	0	0	0	0	5.0	0	0	5.0	4.9	4.9	0	5.0	0	5.0	0
REW	5.0	5.0	4.1	4.3	0	0	0	0	0	5.0	0	0	5.0	4.9	4.9	0	5.0	0	5.0	0
REF. NO.	IC6001																			
MODE	81	82	83	84																
STOP 2	0	-	-	4.2																
PLAY	0	-	-	4.2																
REC	0	-	-	4.2																
F.F.	0	-	-	4.8																
REW	0	-	-	4.8																
REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP 2	0	5.0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	5.0	0	5.0	0	5.0				
PLAY	0	5.0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	5.0	0	4.7	0	5.0				
REC	0	5.0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	5.0	0	4.7	0	5.0				
F.F.	0	0	2.3	5.0	0.5	5.0	5.0	0	1.7	5.0	0.6	4.7	1.5	4.7	5.0	5.0				
REW	0	0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	4.7	0.5	4.4	5.0	5.0				
REF. NO.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP 2	0	0.1	0	0	4.4	0	5.0	0	4.9	0	0	0.1	0.1	4.9	1.9	0	0.1	5.0		
PLAY	0	0.1	0	0	1.5	0	5.0	0	5.0	0	0	0.1	0.1	4.9	1.9	0	0.1	5.0		
REC	0	0.3	0	5.0	3.2	0	5.0	0	4.9	0.1	0	4.3	4.9	0	1.9	0	0.1	5.0		
F.F.	0	0.1	0	0	0	0	5.0	0	5.0	0	0	0.1	0.1	4.9	1.9	0	0	5.0		
REW	0	0.1	0	0	0	0	5.0	0	5.0	0	0	0.1	0.1	4.9	1.9	3.9	3.8	5.0		
REF. NO.	IC6004																			
MODE	1	2	3																	
STOP 2	4.2	4.8	0																	
PLAY	4.2	4.8	0																	
REC	4.2	4.8	0																	
F.F.	4.2	4.8	0																	
REW	4.2	4.8	0																	

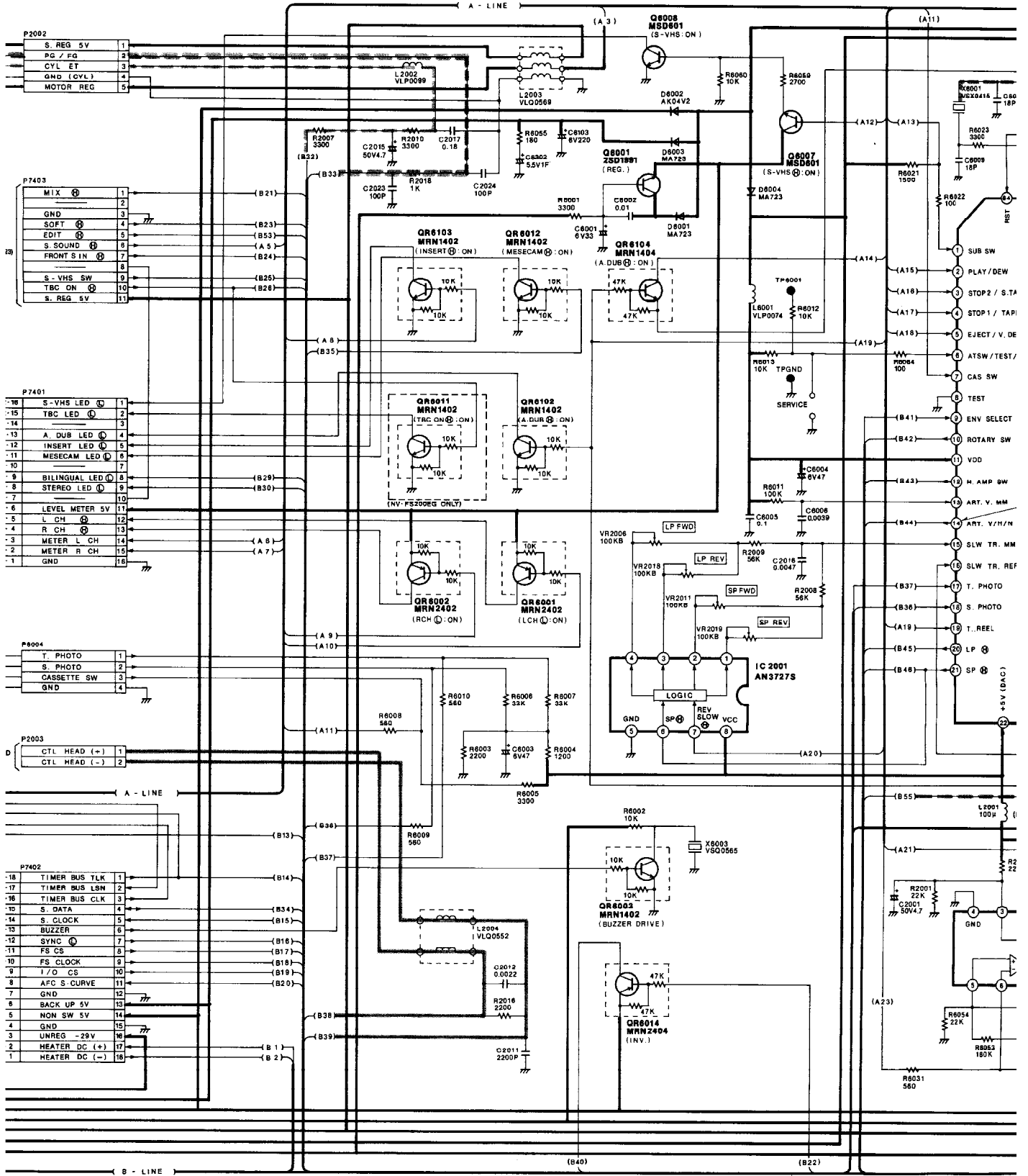
## SYSTEM CONTROL & SERVO TRANSISTORS DC VOLTAGE CHART (SP MODE)

REF. NO.	Q2001			Q2002			Q2003			Q6001			Q6003			Q6004		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	5.0	5.3	5.7	1.7	0	1.0	0	5.0	0	4.9	5.0	5.7	13.4	13.4	5.0	0.7	13.4	0.8
PLAY	5.0	5.3	5.7	3.3	0	2.7	0	0	0.6	4.9	5.0	5.7	13.4	13.4	4.9	0.3	13.4	0.4
REC	5.0	5.3	5.7	0.9	0	0.2	0	0	0.6	4.9	5.0	5.7	13.4	13.4	5.6	0.7	13.4	0.9
F.F.	5.0	5.3	5.7	1.3	0	0.6	0	0	0.6	4.9	5.0	5.7	13.3	13.3	4.9	0.7	13.3	0.8
REW	5.0	5.3	5.7	1.3	0	0.6	0	0	0.6	4.9	5.0	5.7	13.3	13.3	4.9	0.6	13.4	0.7
REF. NO.	Q6005			Q6006			Q6007			Q6008			Q6101			Q6102		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	-0.1	0.2	-0.1	0.4	13.4	0.3	4.2	4.9	4.8	0.7	0	0	4.3	4.8	0.3	5.0	4.6	4.9
PLAY	0	0.2	0	0.5	13.4	0.3	4.2	4.9	4.8	0	0	0.7	4.3	4.8	0.3	5.0	4.7	4.9
REC	0	1.3	0	0.5	13.4	0.3	4.2	4.9	4.8	0	0	0.7	4.5	4.8	0.3	5.0	4.7	4.9
F.F.	0	0.3	0	0.6	13.4	0.3	4.2	4.9	4.8	0	0	0.7	4.2	4.7	0.3	5.0	4.3	4.9
REW	0	0.7	0	0.7	13.4	0.6	4.2	4.9	4.8	0	0	0.7	3.7	4.7	0.2	5.0	4.3	4.9
REF. NO.	QR2001			QR2002			QR6001			QR6002			QR6003			QR6004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	0	0	4.9	0	0	4.9	4.9	4.9	0	4.9	4.9	0	0	0	4.8	1.4	0.1	4.2
PLAY	0	0	4.9	0	0	4.9	4.9	4.9	0	4.9	4.9	0	0	0	4.8	1.4	0	4.2
REC	0	0	4.9	0	0	4.9	4.9	4.9	0	4.9	4.9	0	0	0	4.8	1.4	0	4.2
F.F.	0	0	0	0	1.0	0	4.9	4.9	0	4.9	4.9	0	0	0	4.8	4.9	0	4.8
REW	0	0	0	0	0.9	0	4.9	4.9	0	4.9	4.9	0	0	0	4.8	4.9	0	4.8
REF. NO.	QR6005			QR6006			QR6007			QR6008			QR6009			QR6010		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	5.0	1.4	4.9	5.0	-0.1	5.0	5.0	0.1	4.7	5.0	0.3	5.0	0	0.1	4.2	0	0.3	5.0
PLAY	5.0	1.4	4.9	5.0	0	5.0	5.0	0.3	4.7	5.0	0.3	5.0	0	0.1	4.2	0	0.3	4.7
REC	5.0	1.4	4.9	5.0	0	5.0	5.0	0.3	4.7	5.0	0.3	5.0	0	0.1	4.2	0	0.3	4.7
F.F.	5.0	4.9	0	5.0	0	5.0	5.0	0.6	4.4	5.0	0.3	5.0	0	0.1	4.8	0	0.3	4.4
REW	5.0	4.9	0	5.0	0	5.0	5.0	0.6	4.4	5.0	0.3	5.0	0	0.1	4.8	0	0.5	4.4
REF. NO.	QR6011			QR6012			QR6014			QR6101			QR6102			QR6103		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0.2	4.1	0	3.4	0	0	3.4	0
PLAY	0	3.5	0	0	3.7	0.4	5.0	4.4	4.9	0	0.2	4.1	0	3.4	0	0	3.4	0
REC	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0.3	4.1	0	3.4	0	0	3.4	0
F.F.	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0	4.2	0	3.3	0	0	3.3	0
REW	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0.3	4.2	0	3.3	0	0	3.3	0
REF. NO.	QR6104																	
MODE	E	C	B															
STOP 2	0	4.6	0															
PLAY	5.0	4.4	0															
REC	5.0	4.5	0															
F.F.	4.9	4.4	0															
REW	4.9	4.3	0															

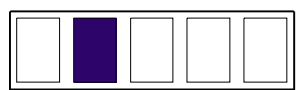


CAPSTAN SERVO SPEED LOOP

CAPSTAN SERVO



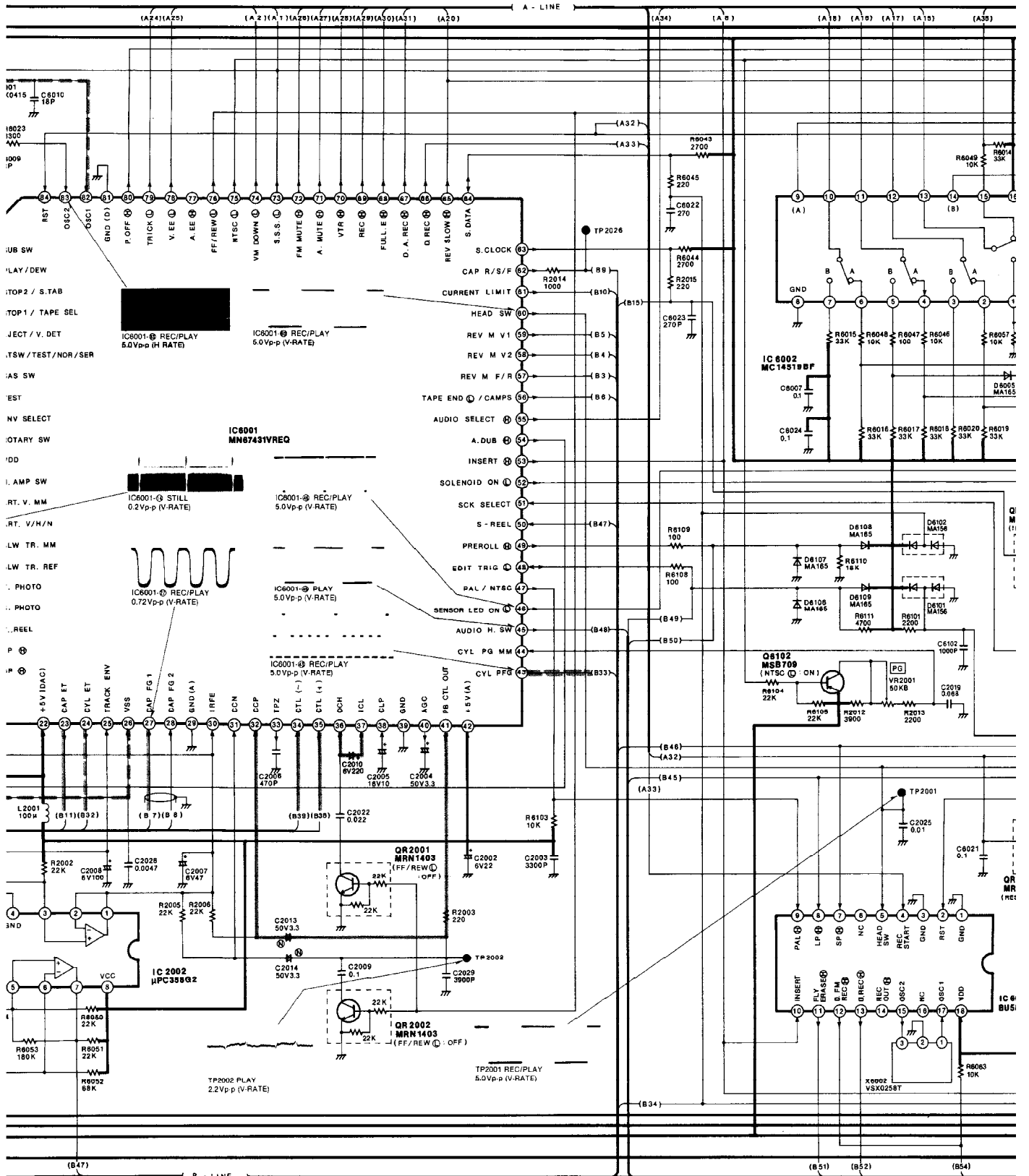
6 | 7 | 8 | 9 | 10 | 11



RVO PHASE LOOP

CYLINDER SERVO SPEED LOOP

CYLINDER SERVO PH...



12

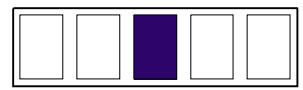
13

14

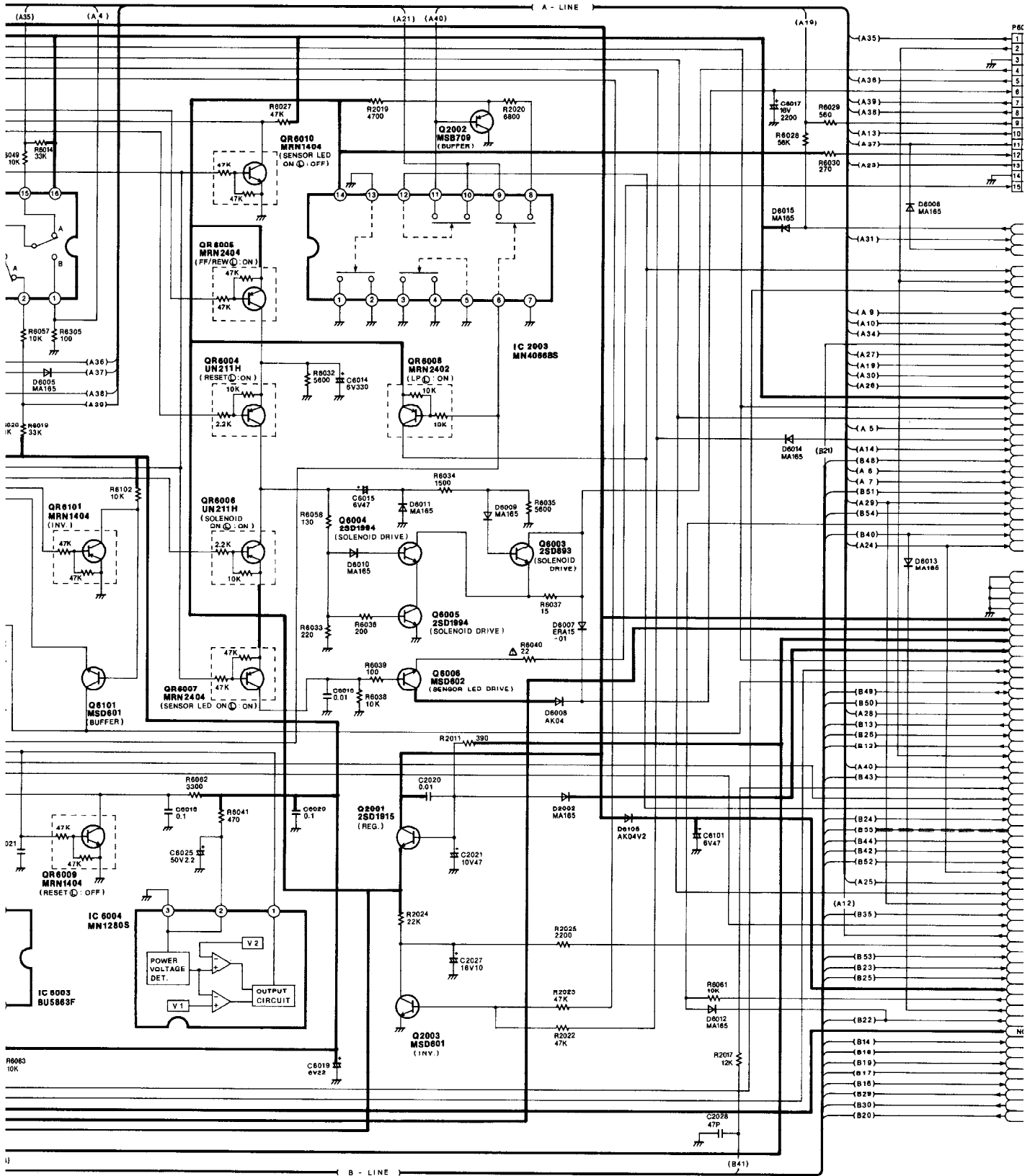
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# O PHASE LOOP



18

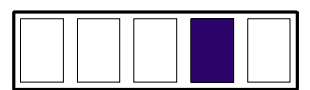
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20

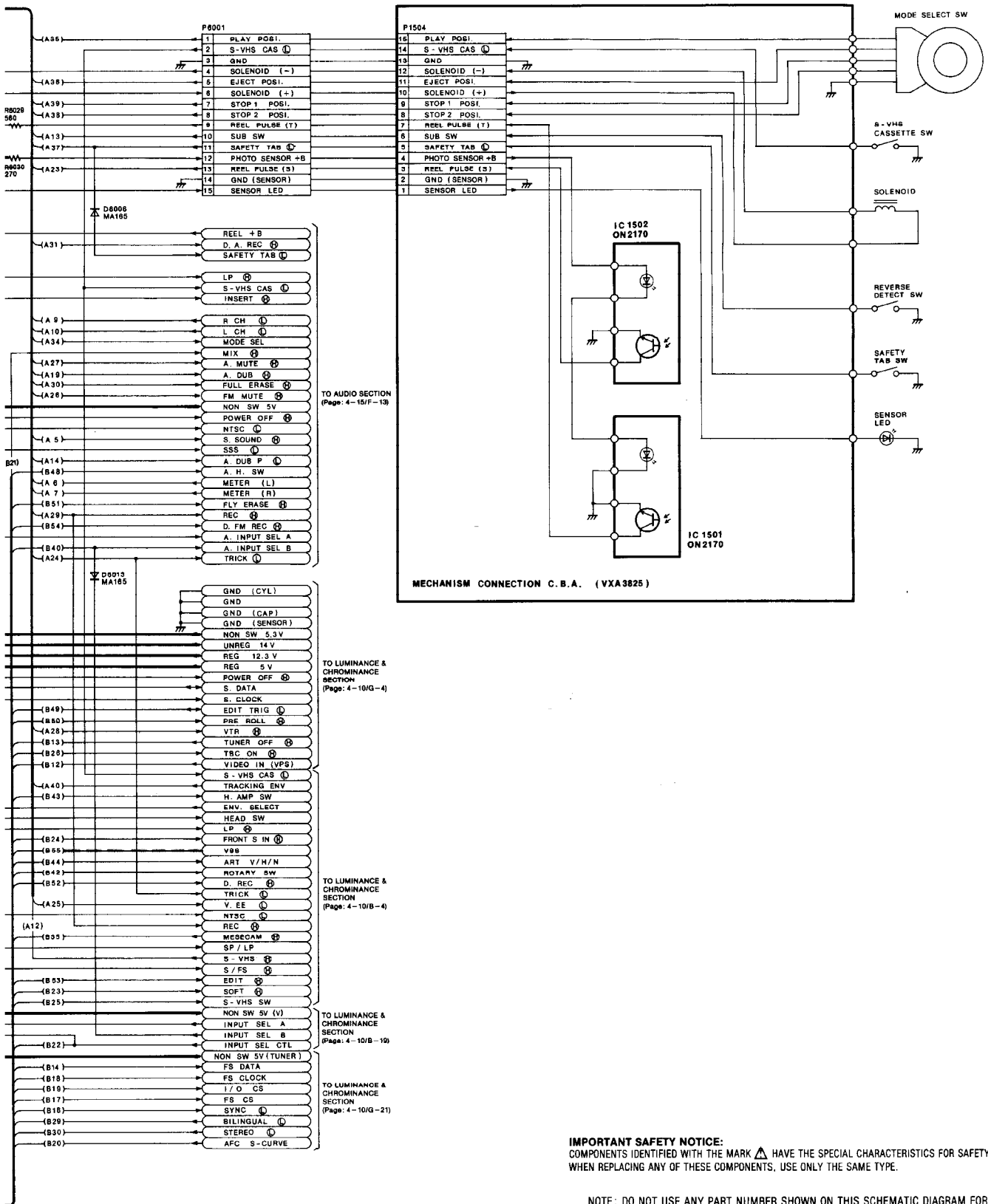
21

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23

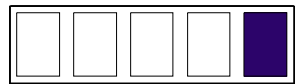




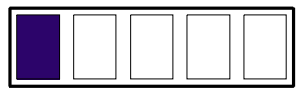
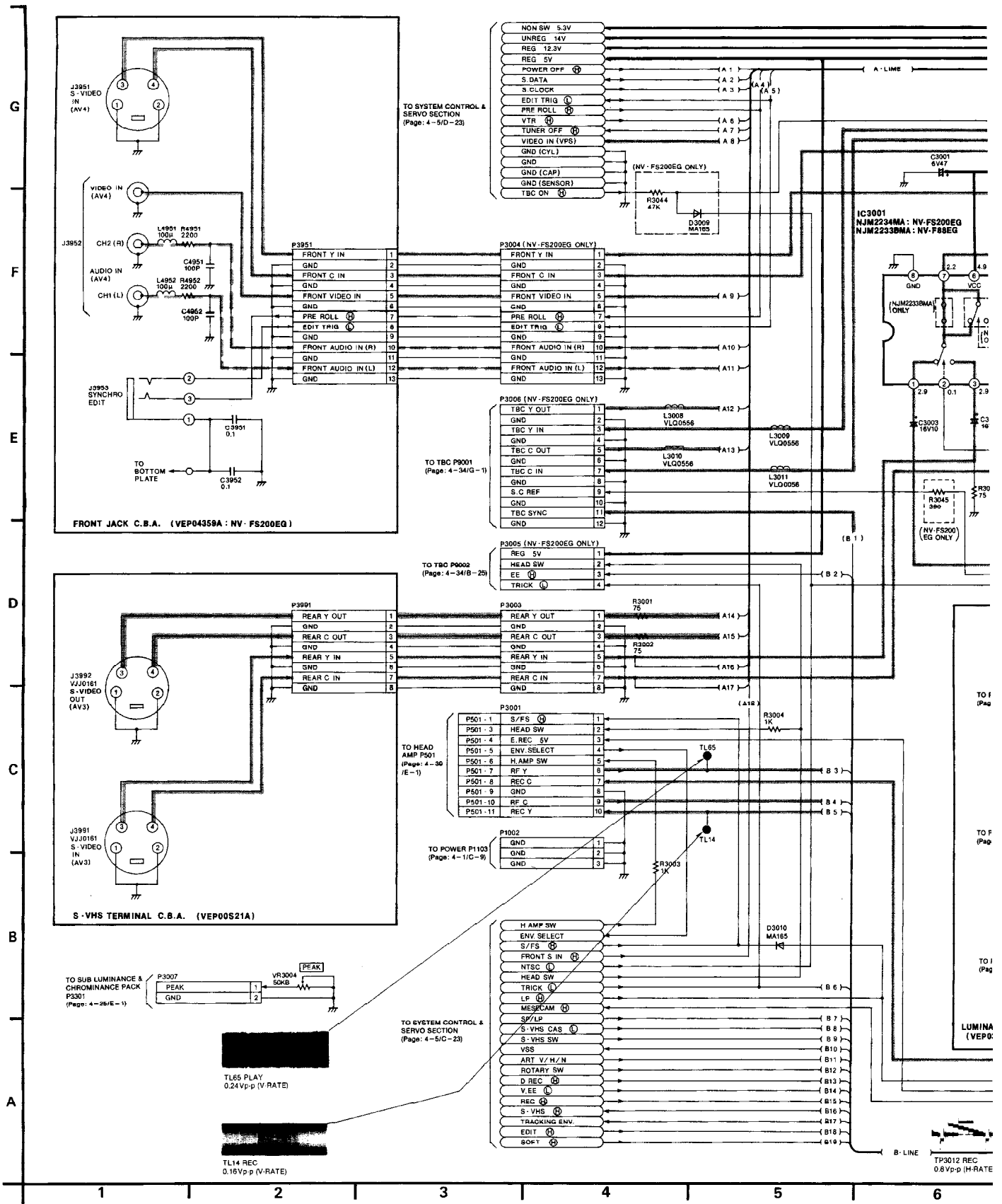


**IMPORTANT SAFETY NOTICE:**  
 COMPONENTS IDENTIFIED WITH THE MARK HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

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

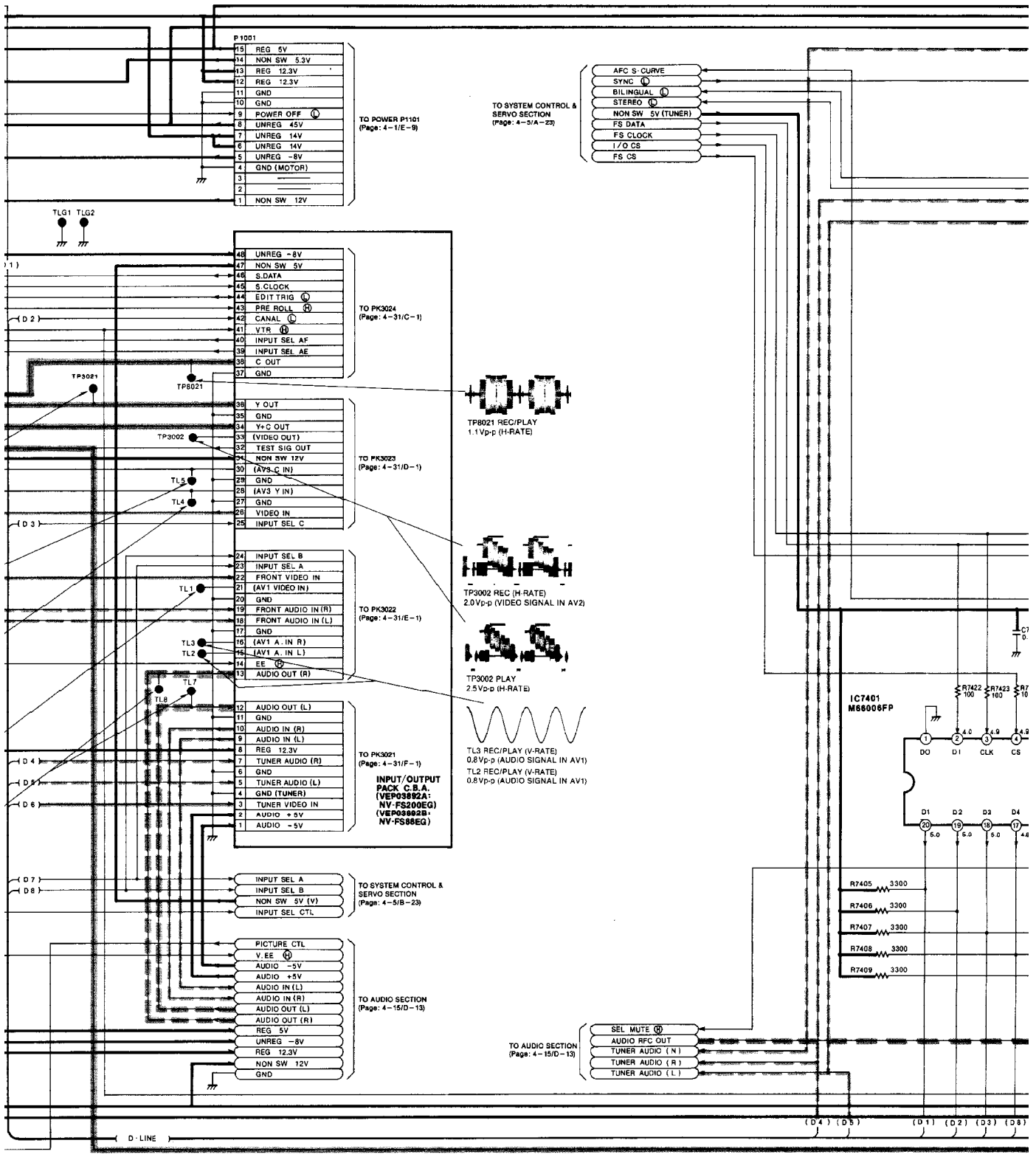


# 4-3. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAG

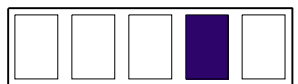


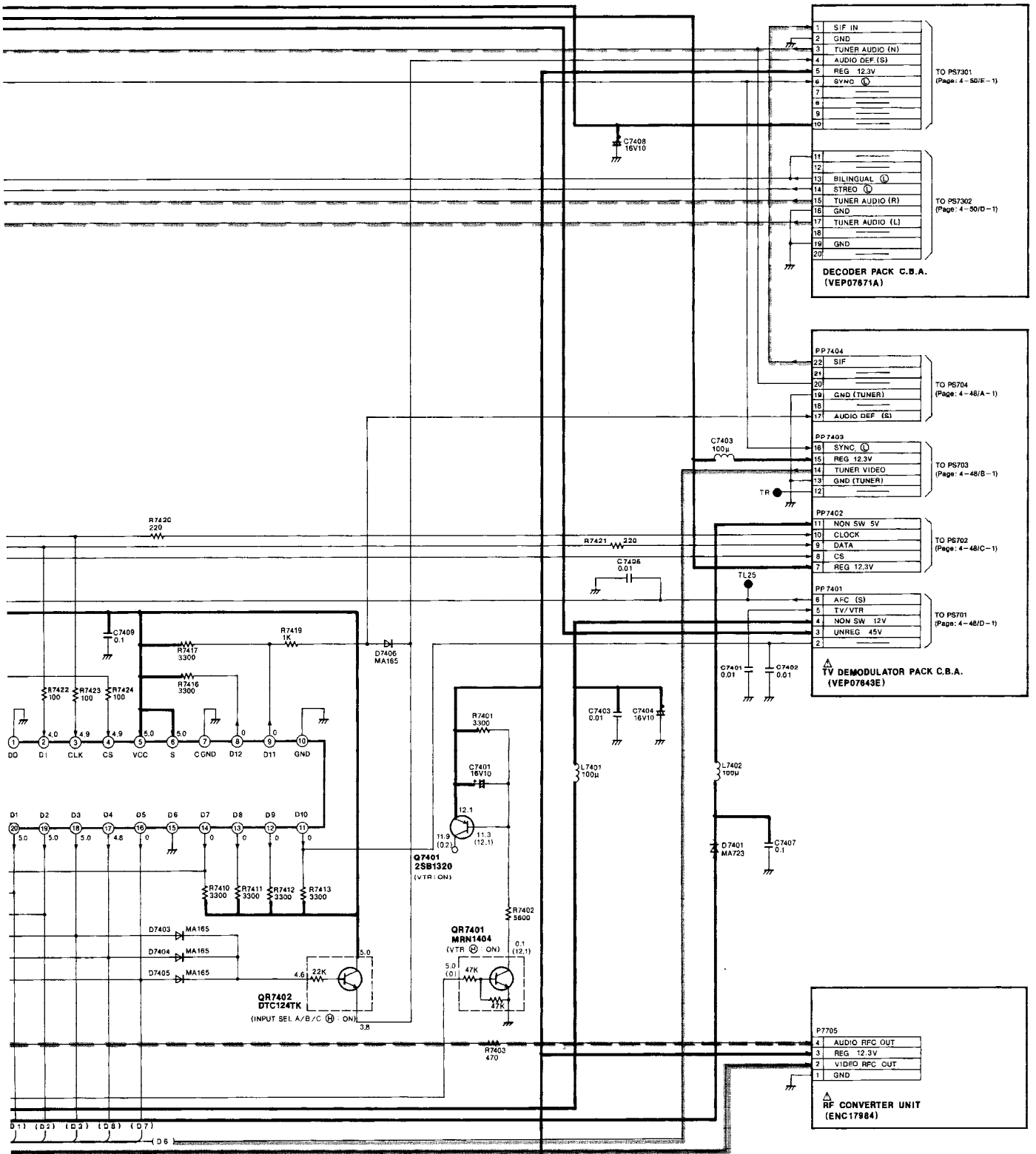






**IMPORTANT SAFETY NOTICE:**  
COMPONENTS IDENTIFIED WITH THE MARK HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.  
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.





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

23

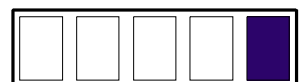
24

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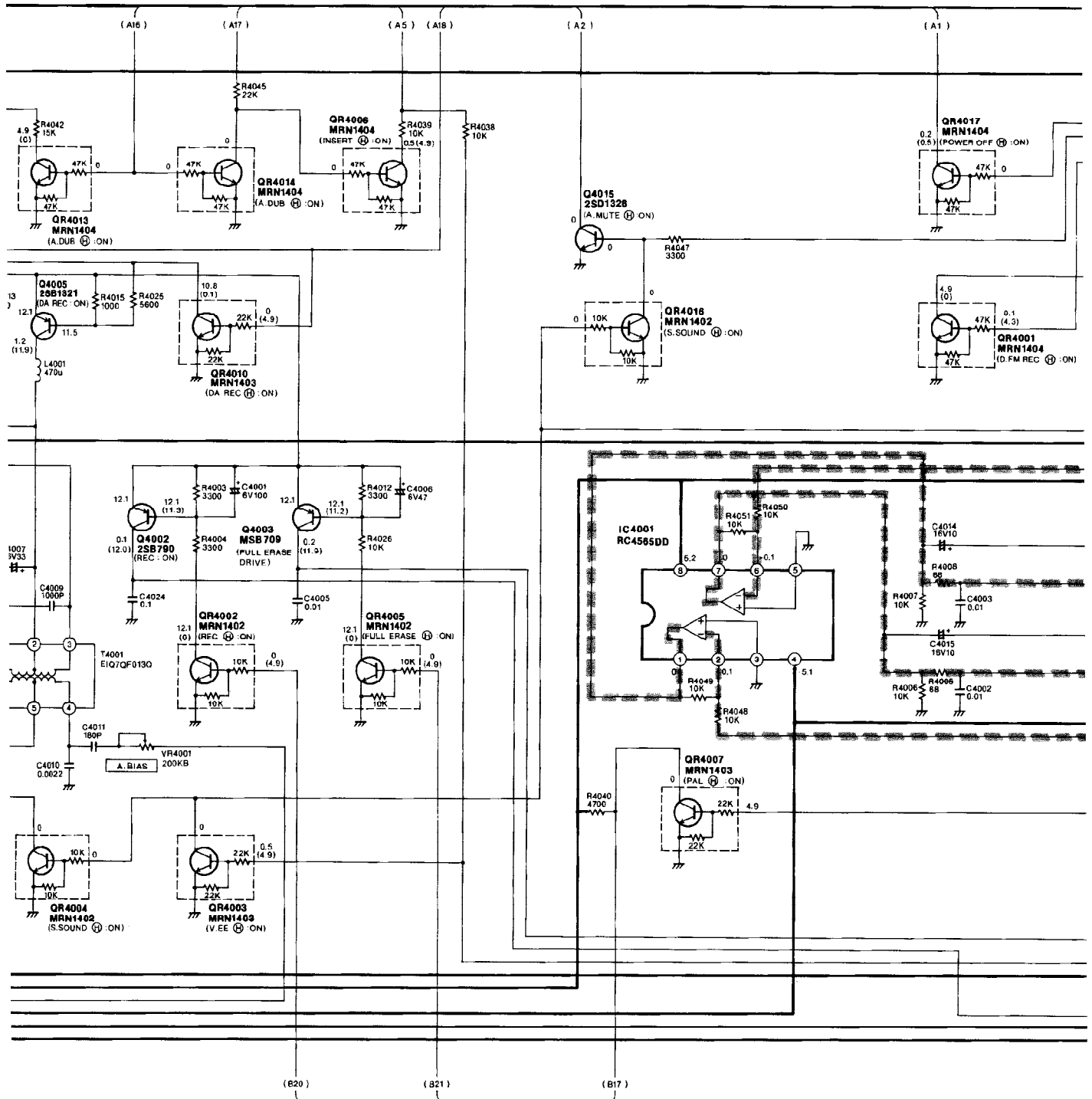
28





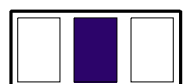
PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

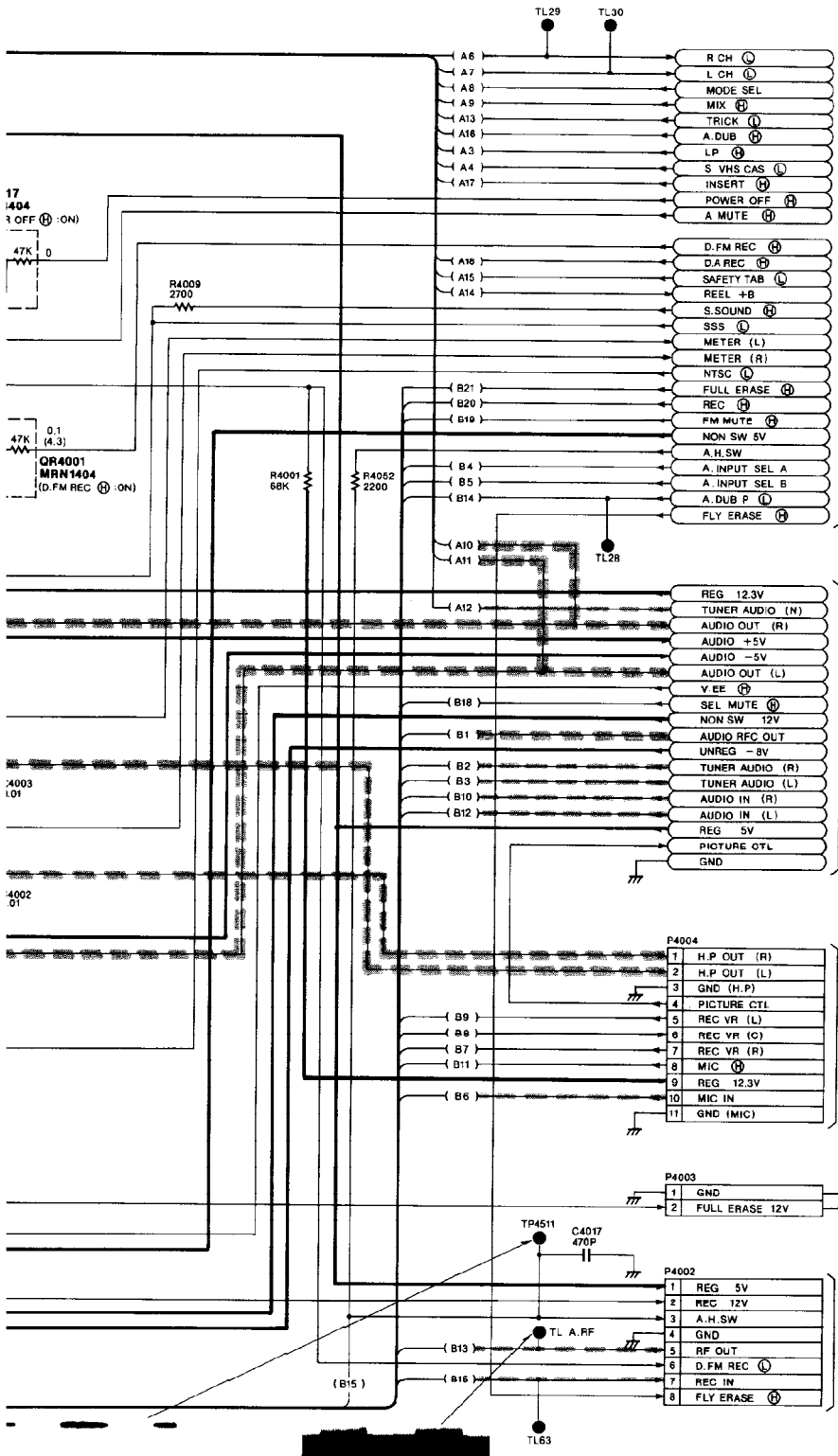


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) • LINE IN SIGNAL LEVEL... -10dB 1kHz  
 THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

TP4511 PLAY  
 5.0Vp-p (V-RATE)





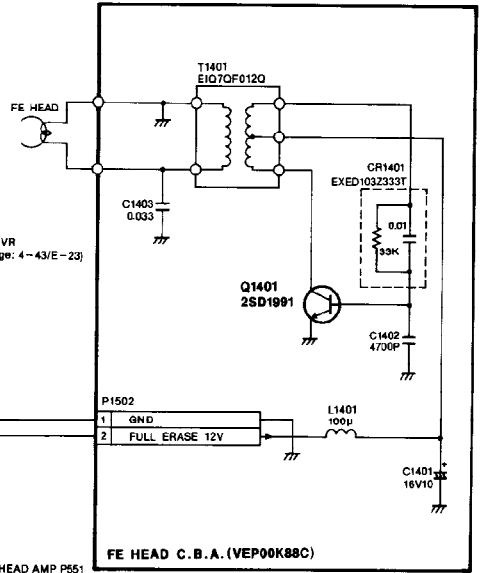


TO SYSTEM CONTROL & SERVO SECTION  
(Page: 4-5/F-23)

TO LUMINANCE & CHROMINANCE SECTION  
(Page: 4-10/B-19, A-21)

TO VR  
(Page: 4-43/E-23)

TO HEAD AMP P551  
(Page: 4-39/E-10)



P4511 PLAY  
0Vp-p (V-RATE)

TL A.R.F PLAY  
0.9Vp-p (V-RATE)

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

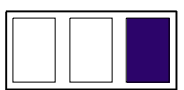
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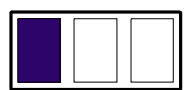
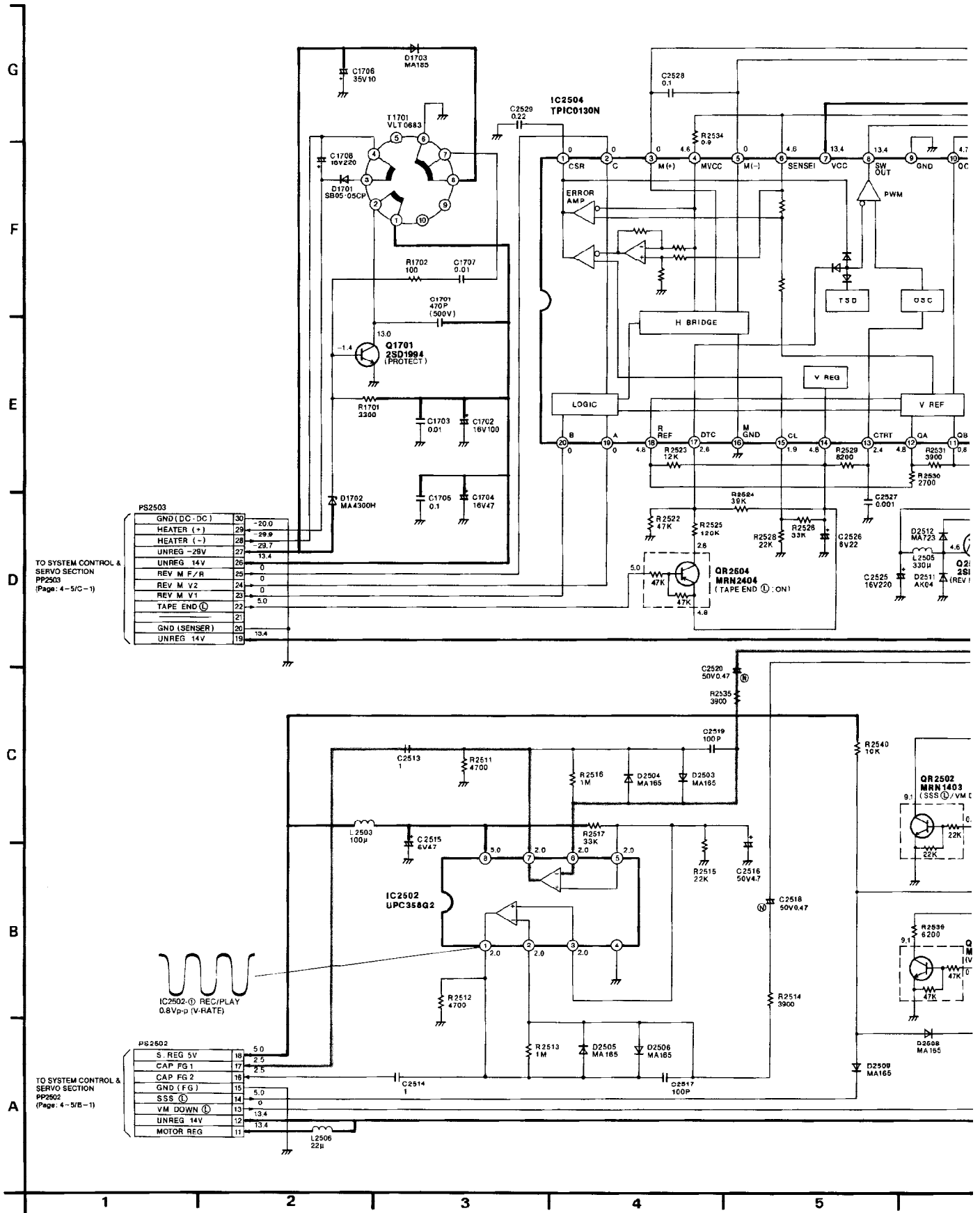
14

15

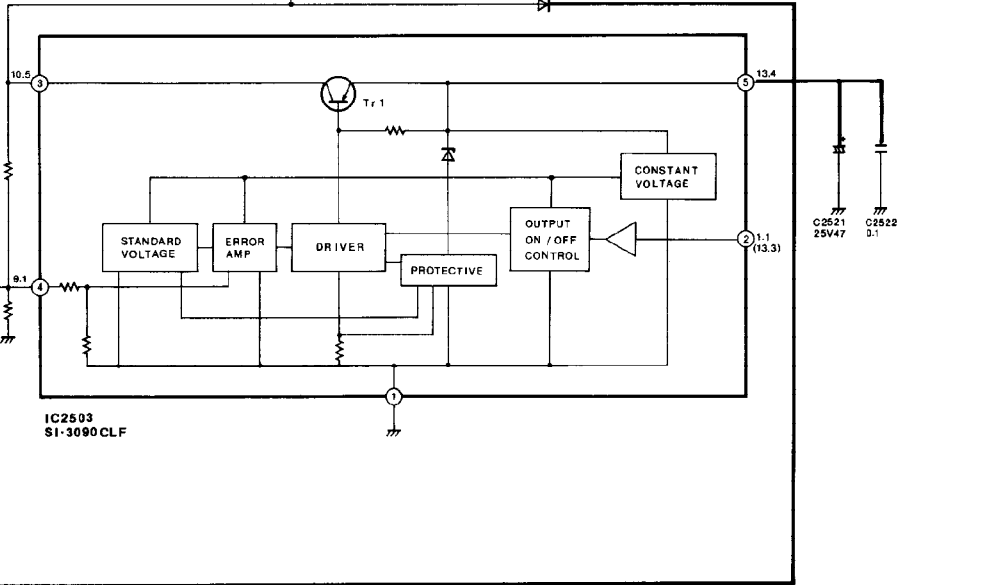
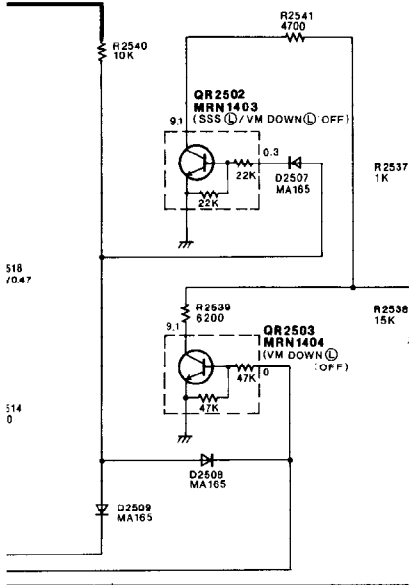
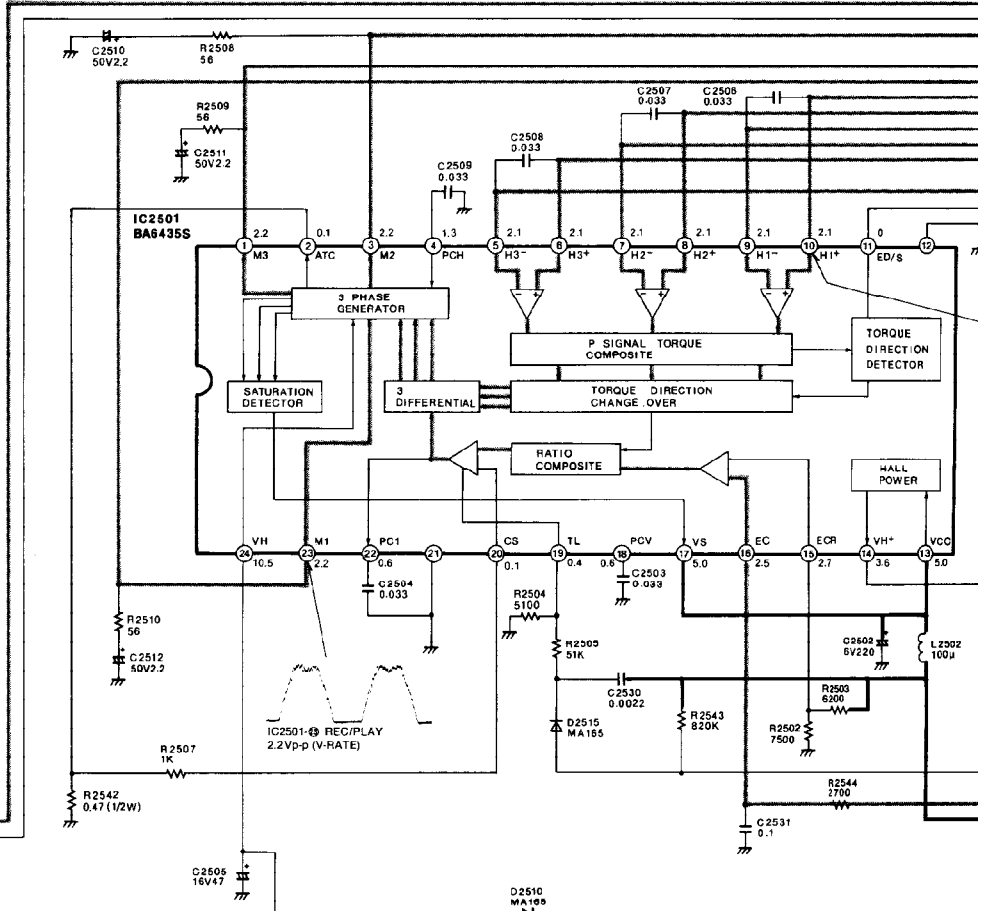
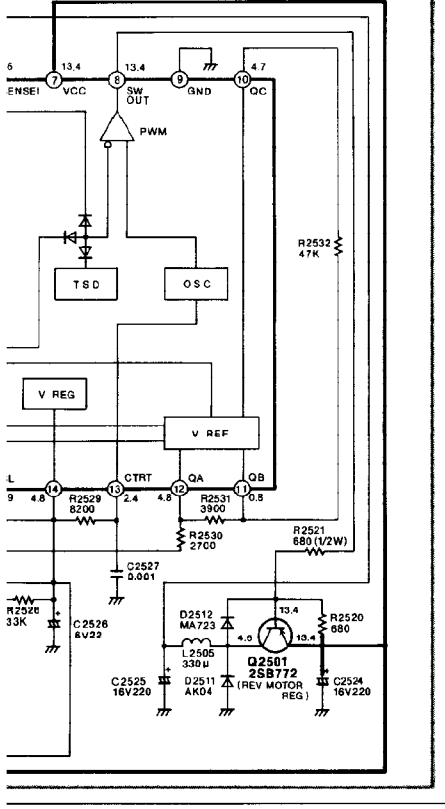


# 45. SERVO PACK SCHEMATIC DIAGRAM

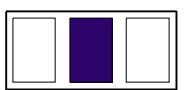
## CAPSTAN SERVO SPEE

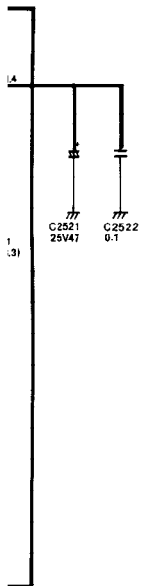
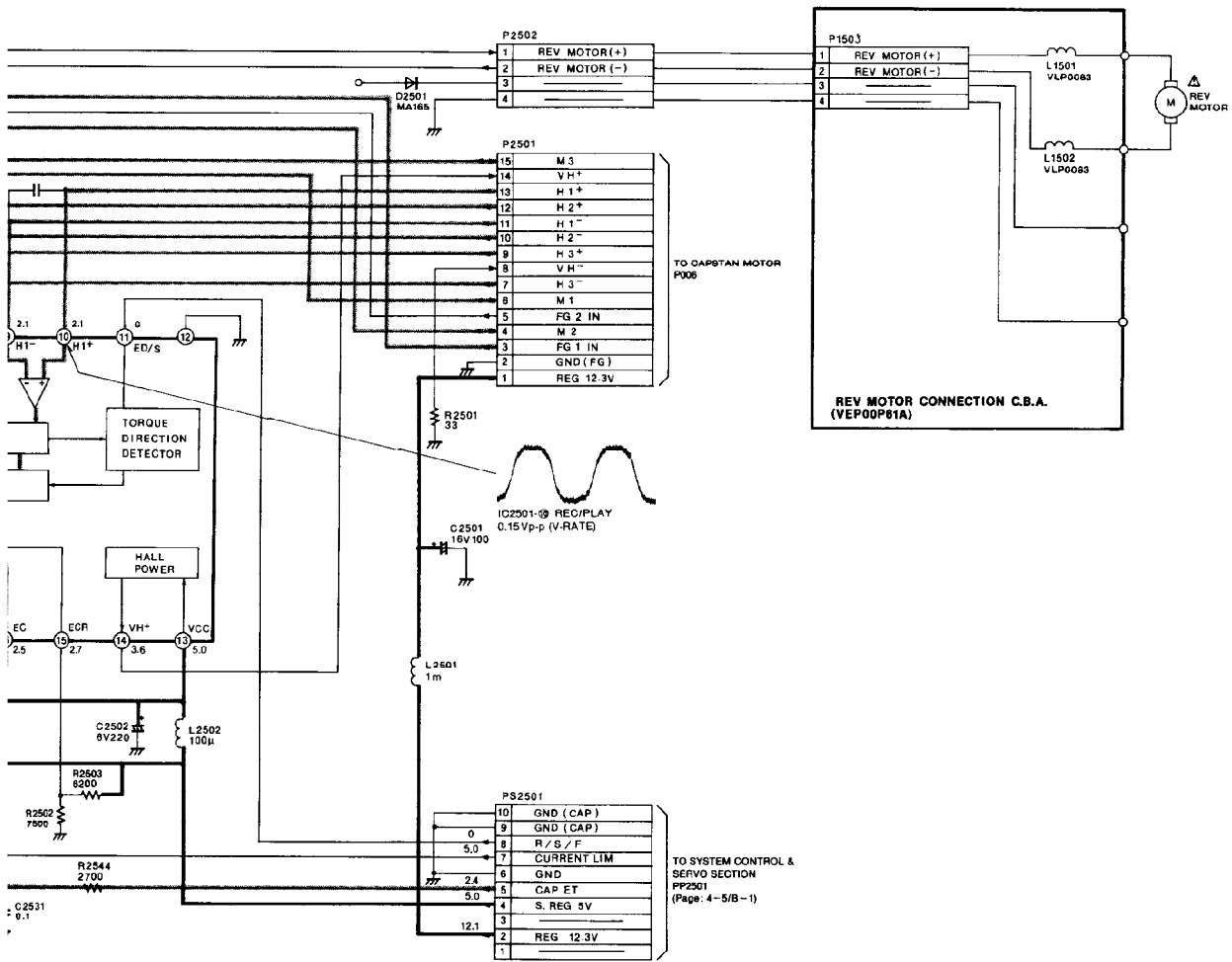


# TAN SERVO SPEED LOOP



5 6 7 8 9 10





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

**IMPORTANT SAFETY NOTICE:**  
COMPONENTS IDENTIFIED WITH THE MARK  $\Delta$  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 IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)  
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

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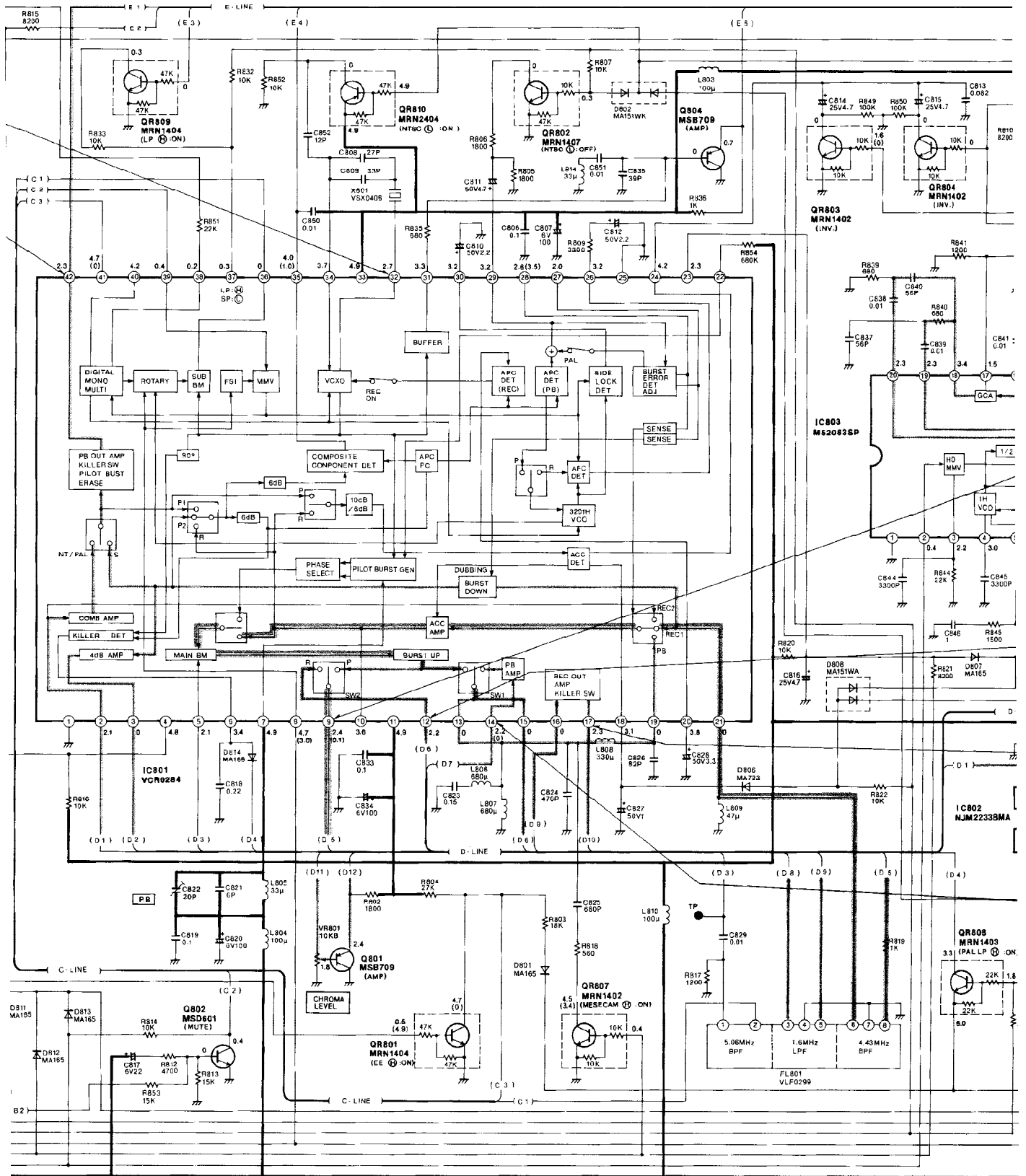
14







# L PATH IN PLAYBACK MODE



12

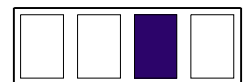
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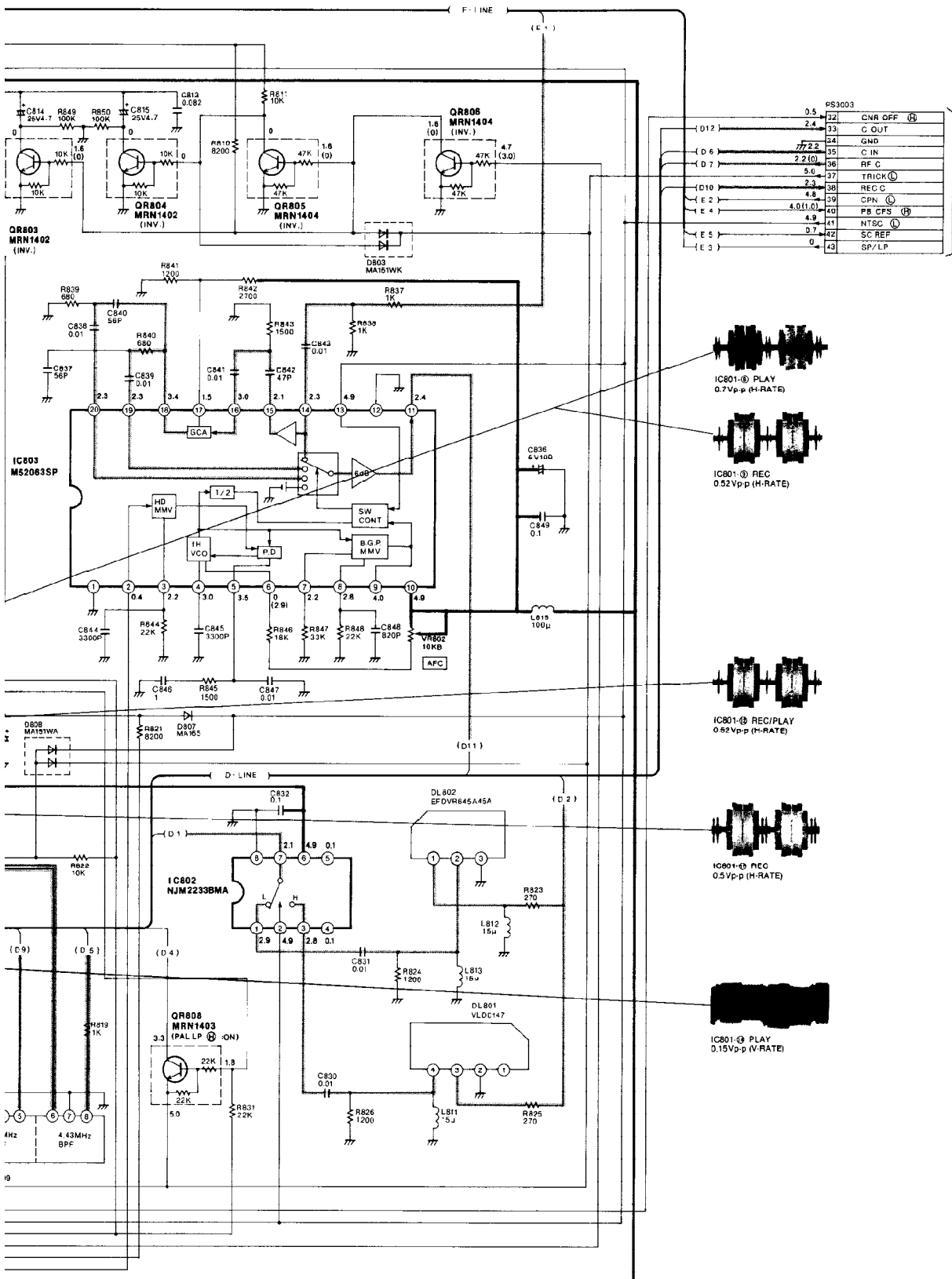
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TO LUMINANCE & CHROMINANCE SECTION PS3003 (Page: 4-10/D-7)

ECORD MODE THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: 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.

16

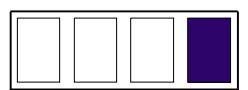
17

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19

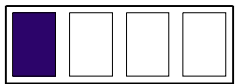
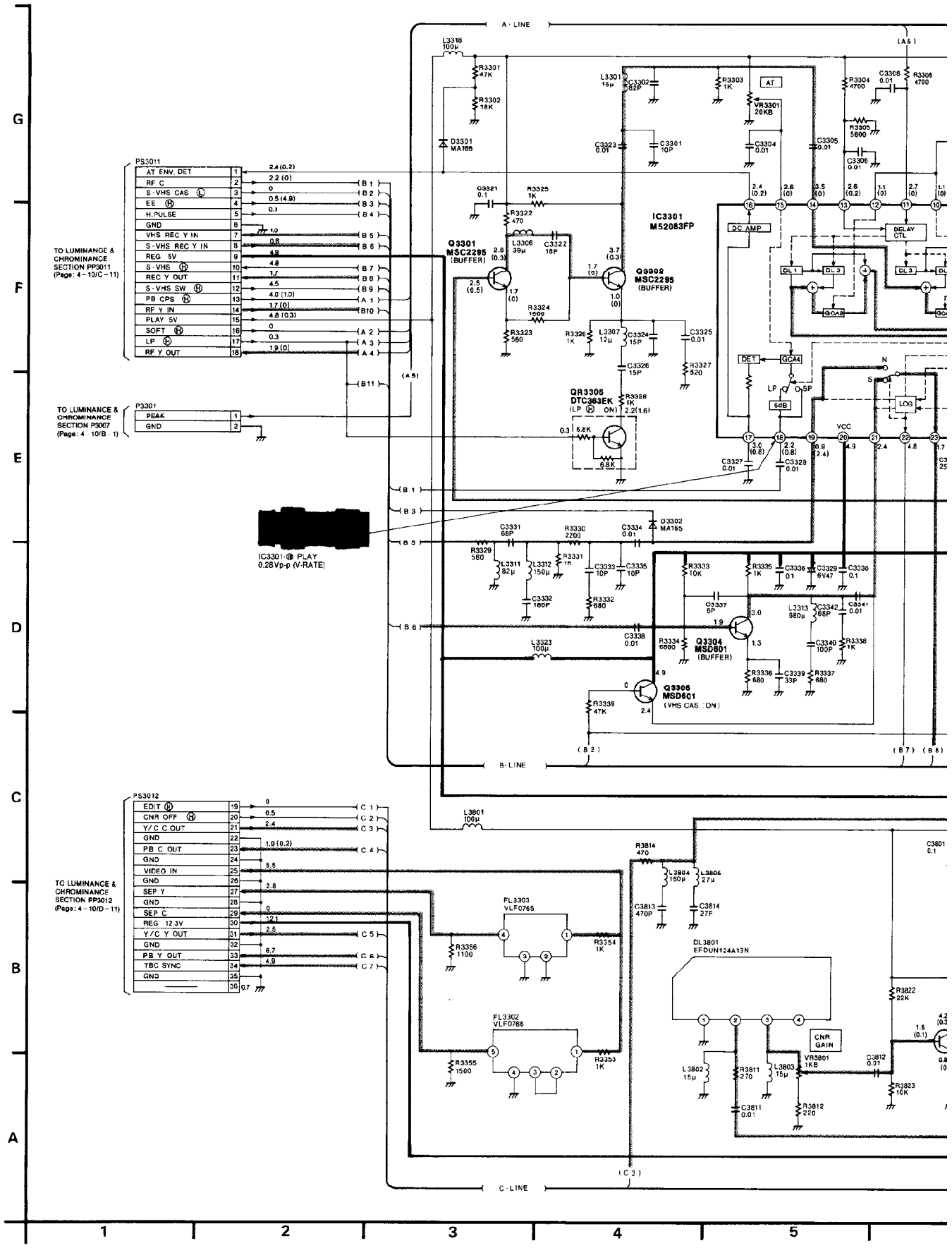
20

21

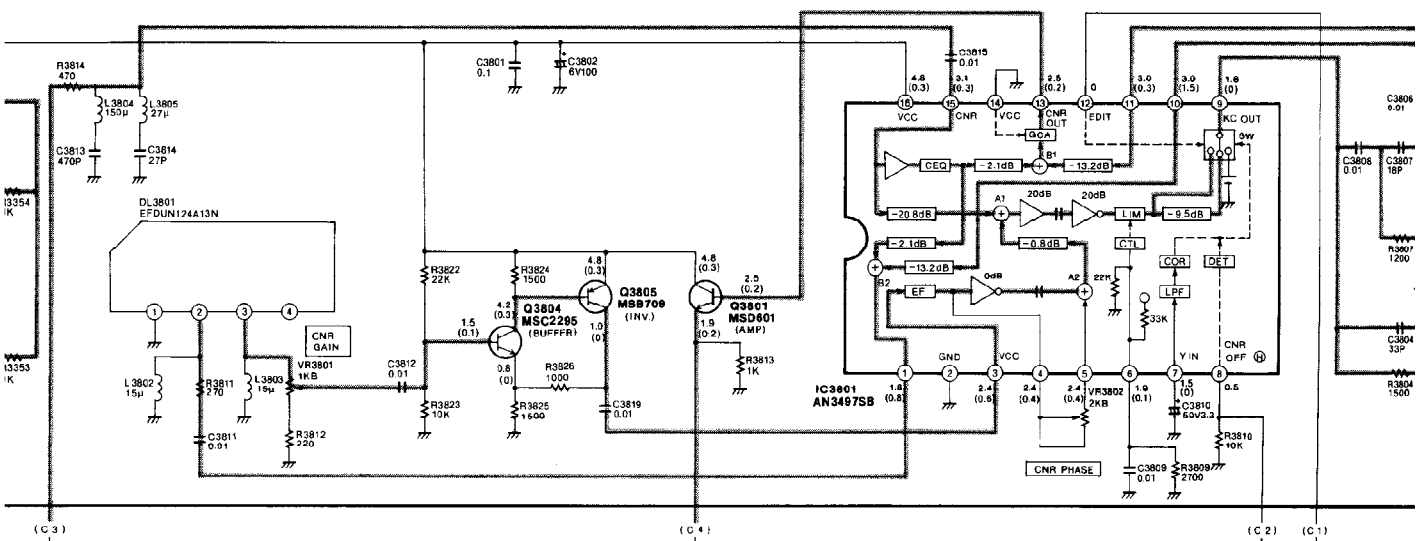
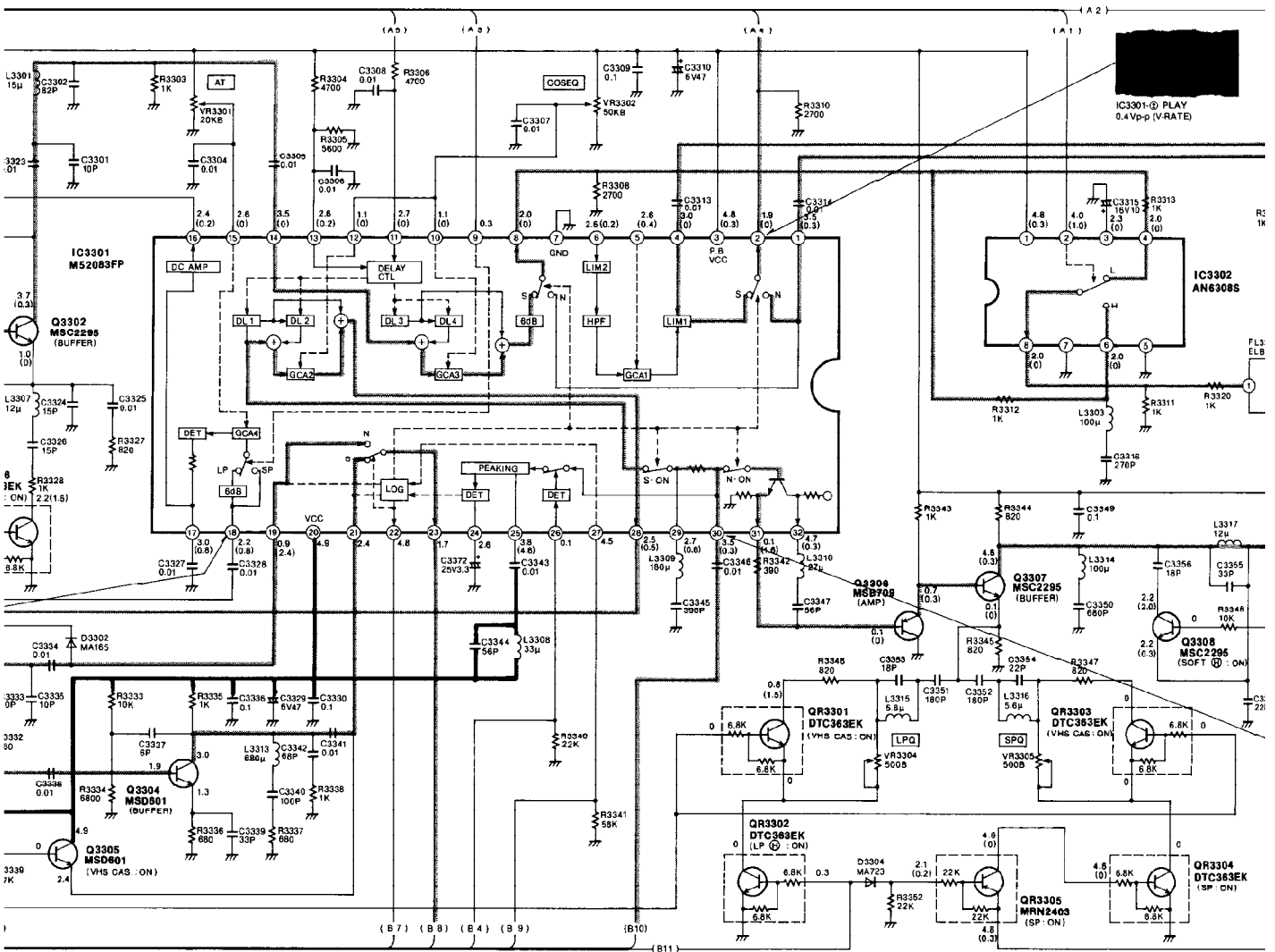




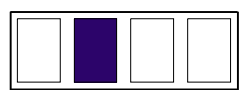
# 4-7. SUB LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM



# CK SCHEMATIC DIAGRAM

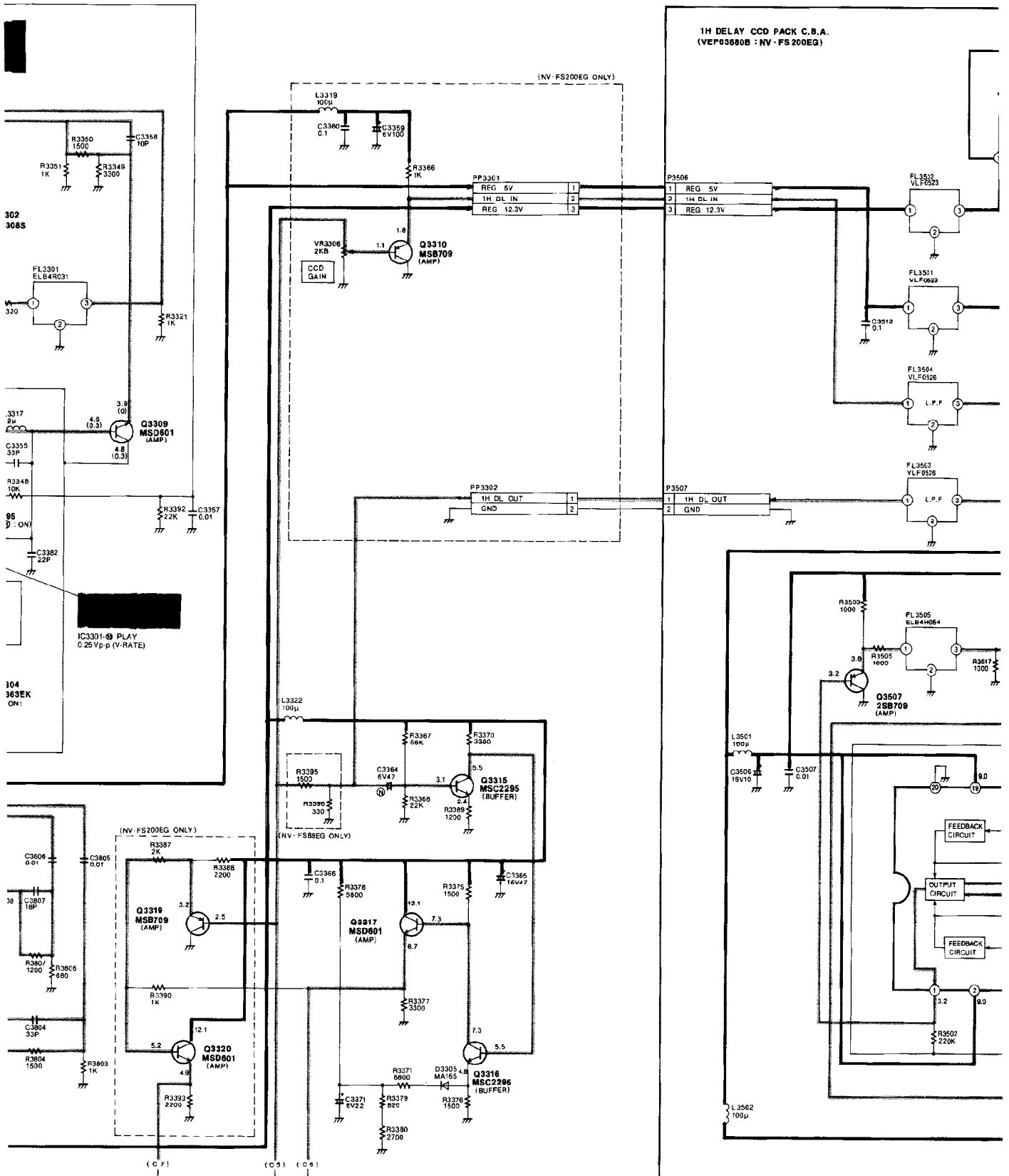


NOTE: THE MEA WITH PA



# MAIN SIGNAL PATH IN REC MODE

MAIN



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

10

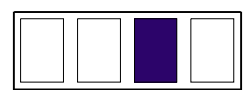
11

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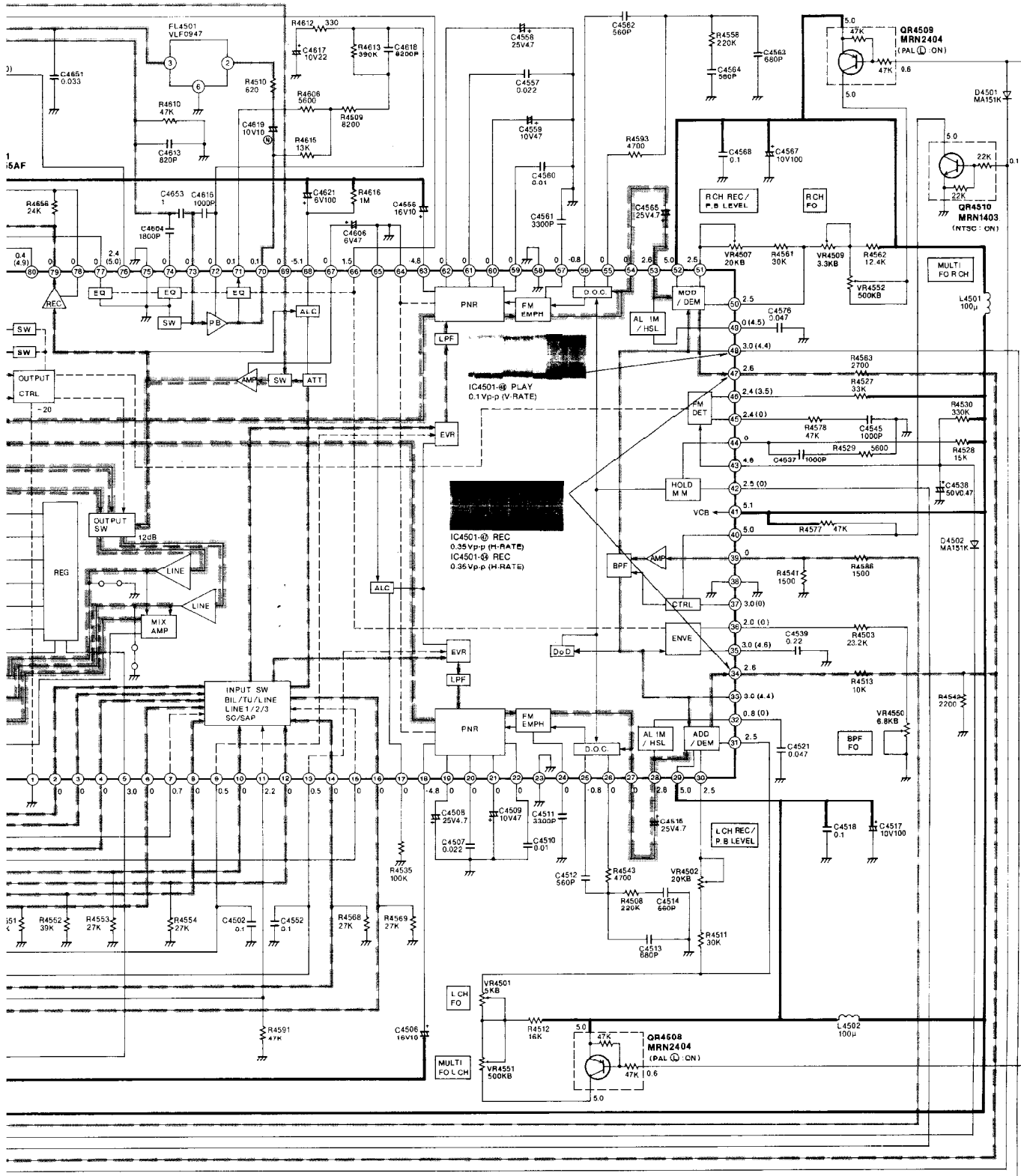
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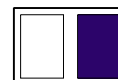


DE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE  
 AL. (S-VHS: SP MODE)  
 DE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE  
 AL. (S-VHS: SP MODE)

• 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.

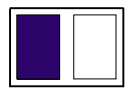
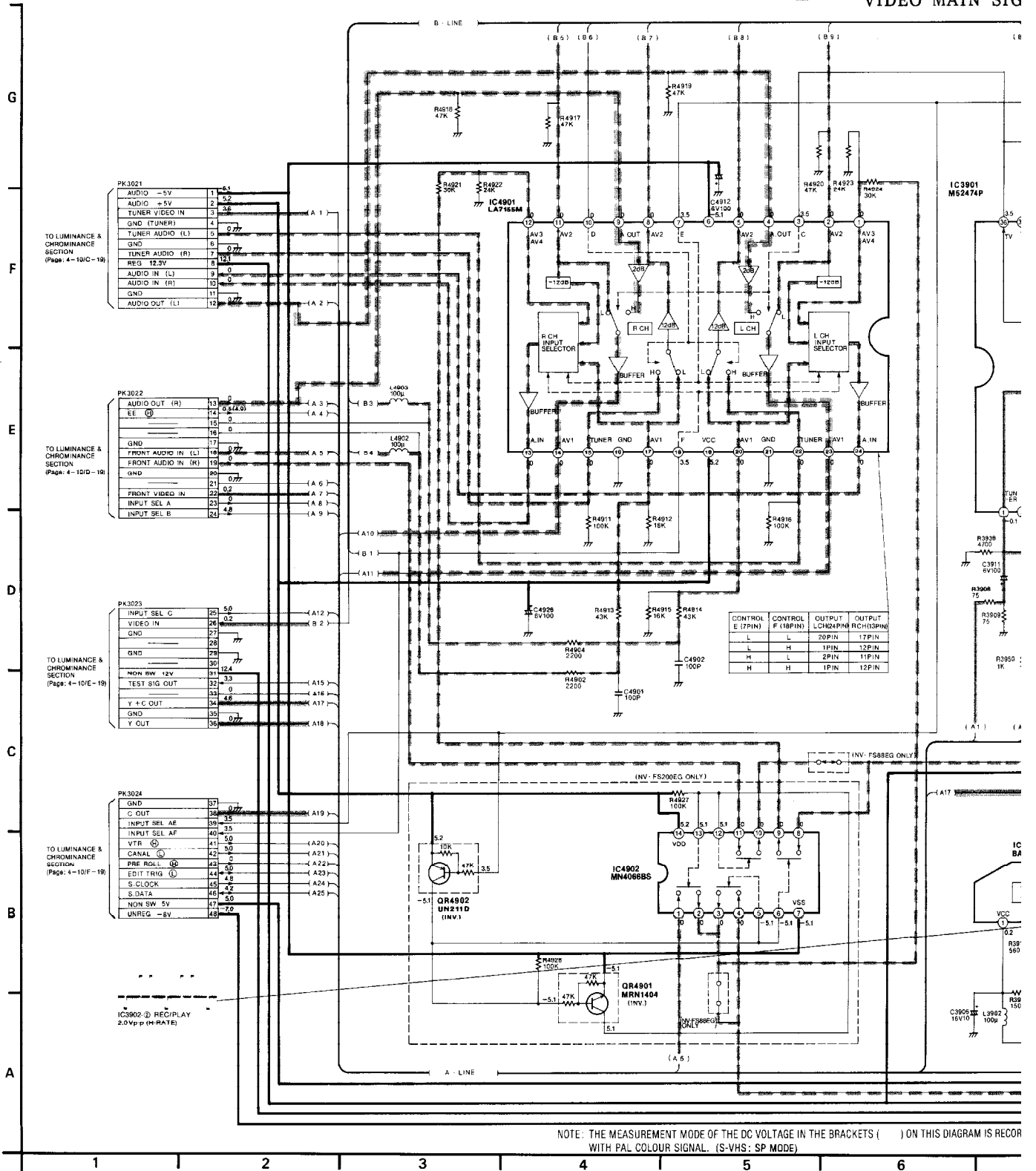
6 | 7 | 8 | 9 | 10 | 11



# 4.9. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIG

VIDEO MAIN SIG

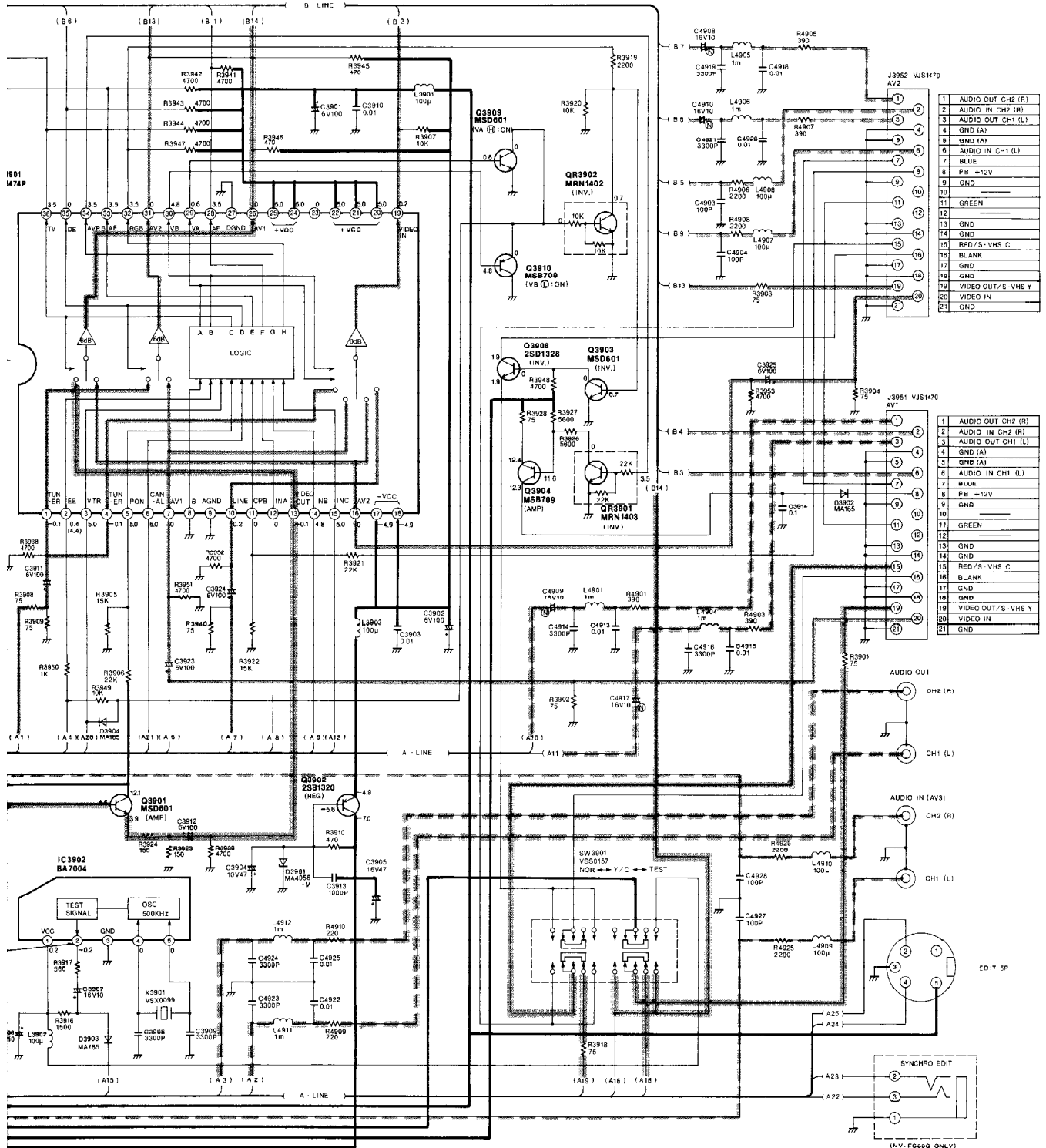


IN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

IN SIGNAL PATH IN PLAYBACK MODE

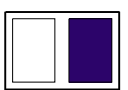
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



RAM IS RECORD MODE THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: 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.

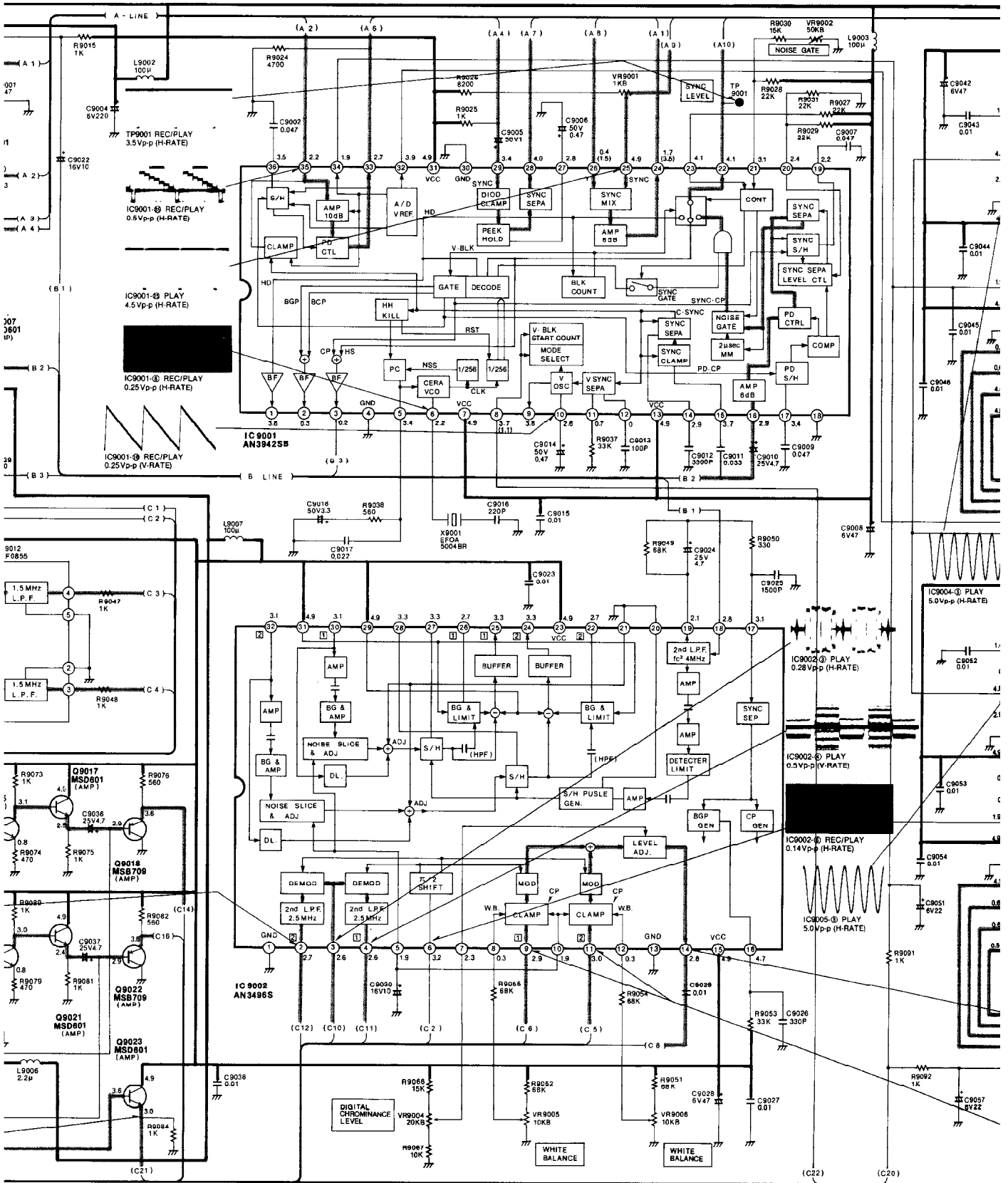
7 8 9 10 11 12







# MAIN SIGNAL PATH IN PLAYBACK MODE



6

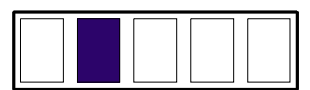
7

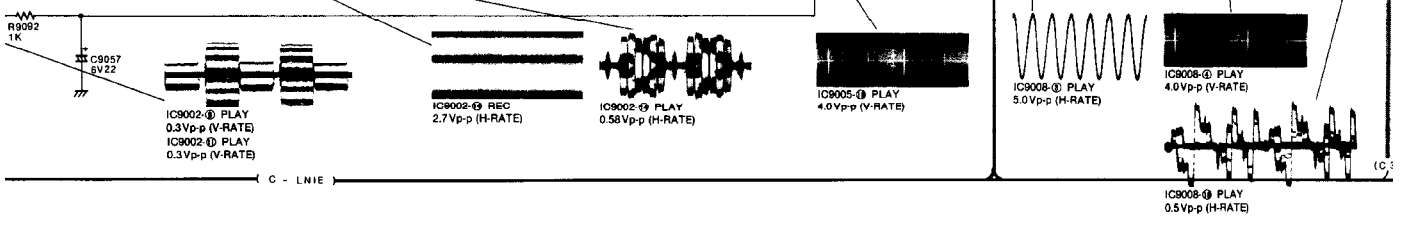
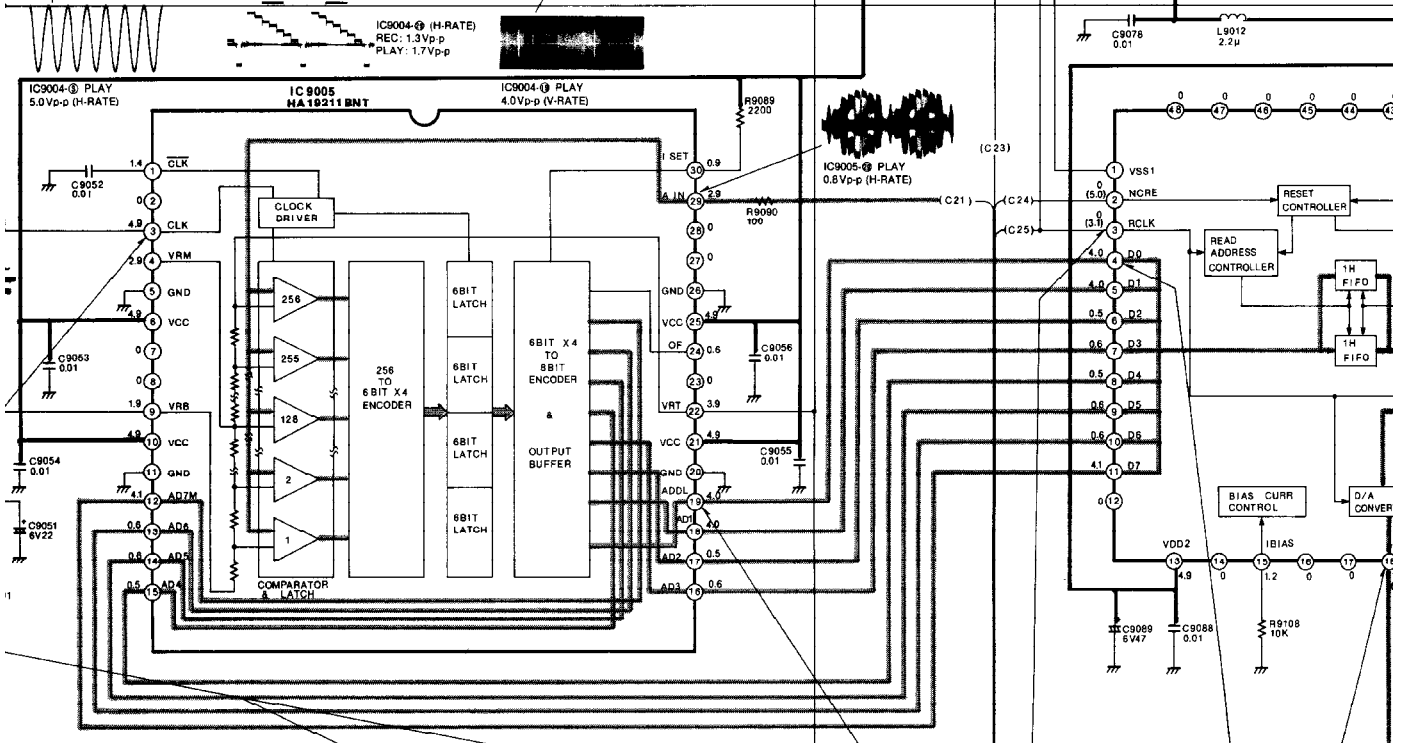
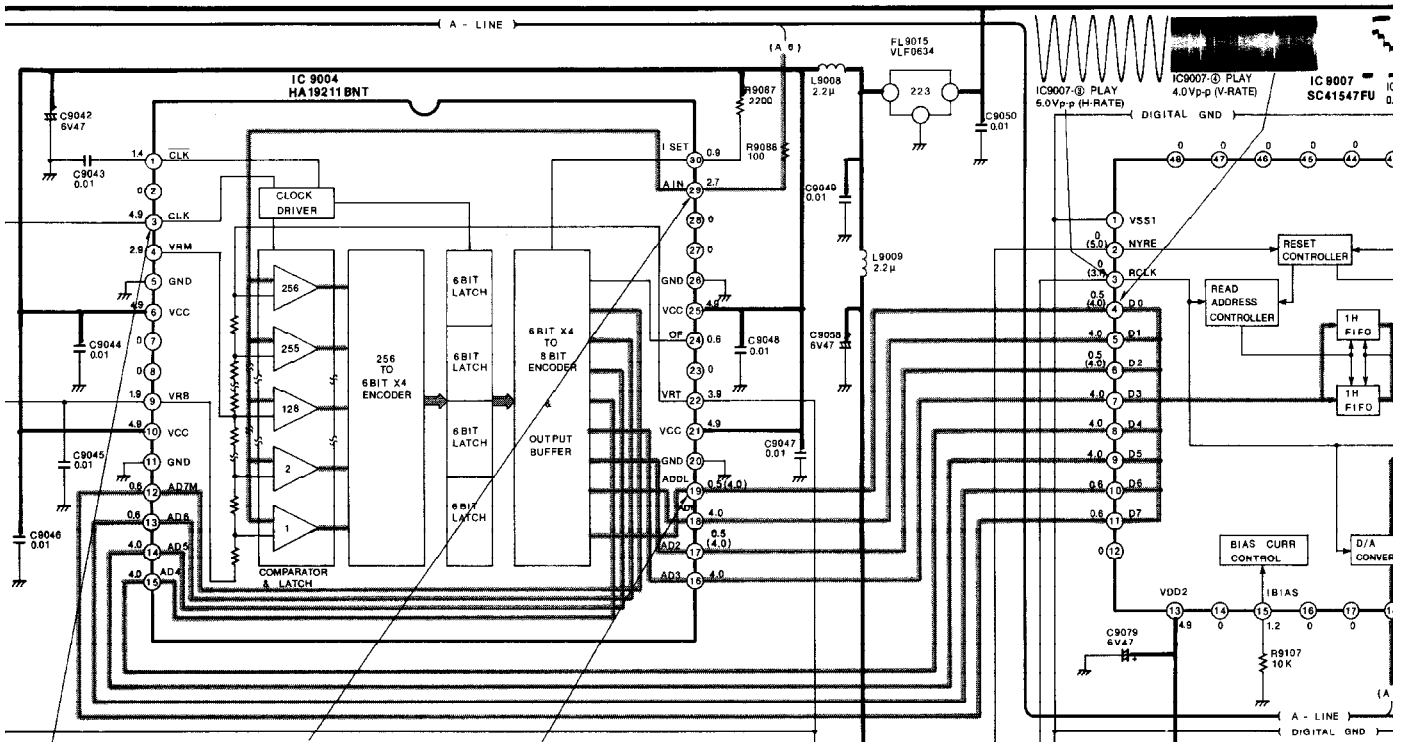
8

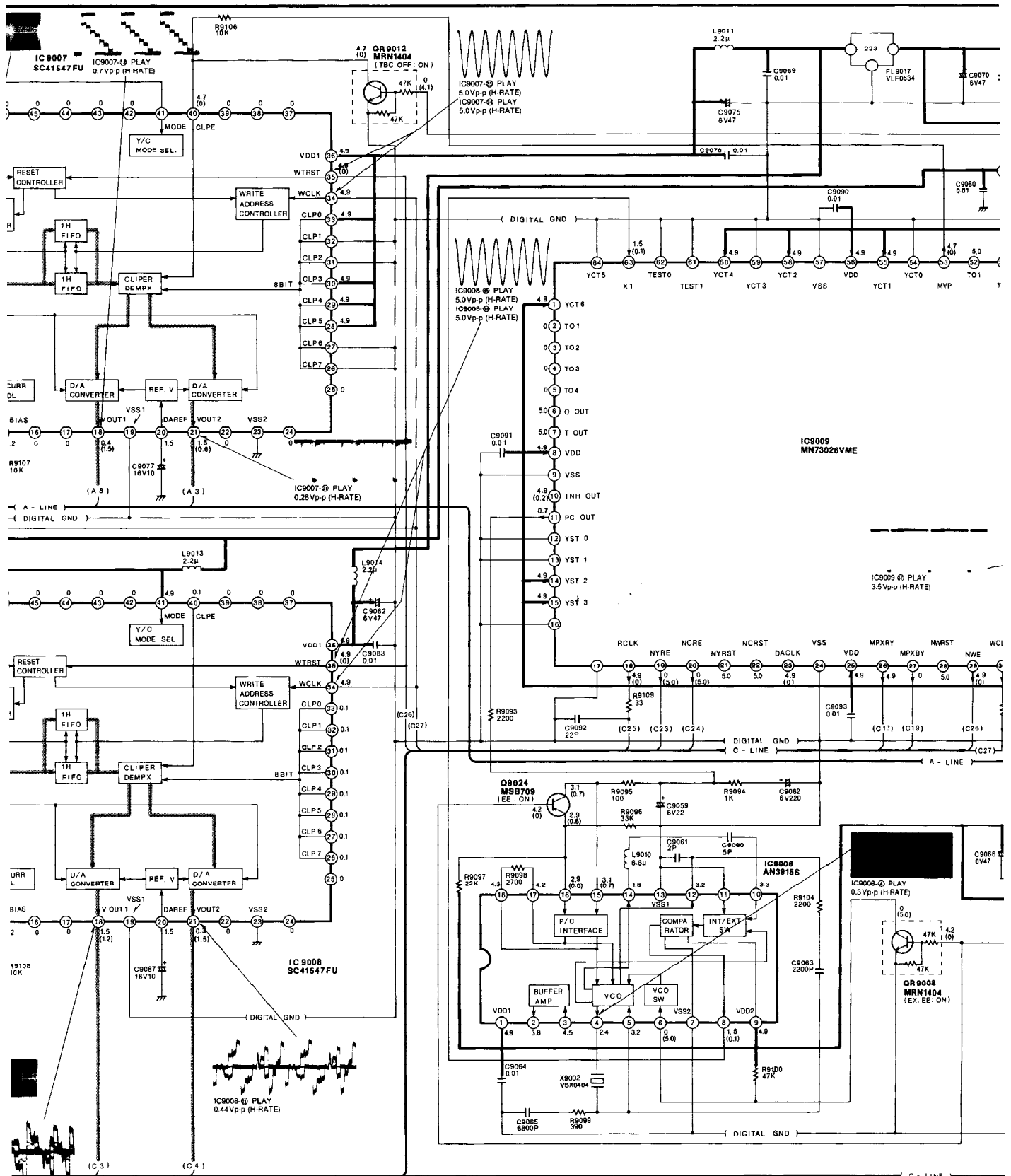
9

10

1







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

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKET WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

16

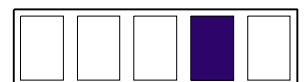
17

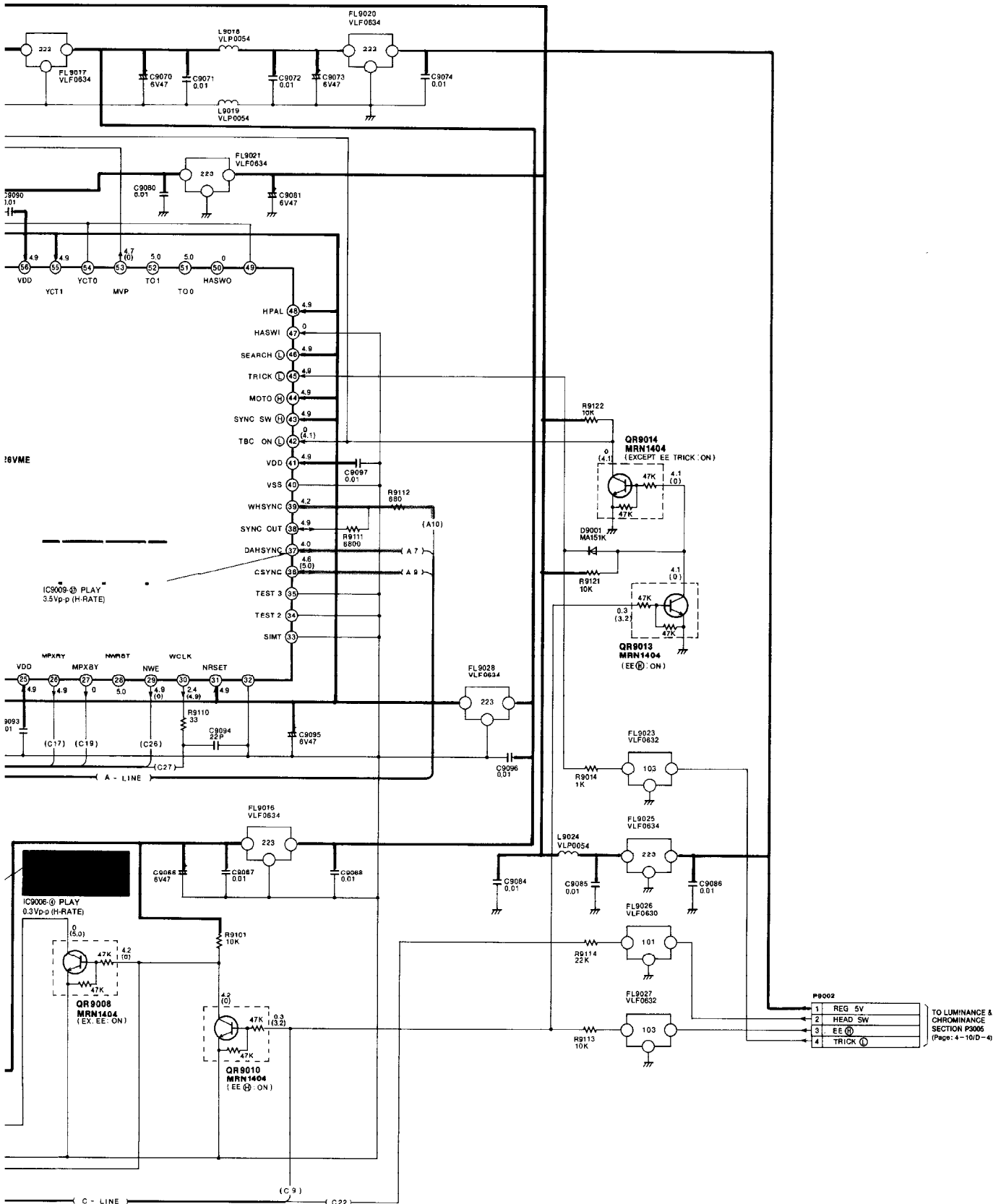
18

19

20

21

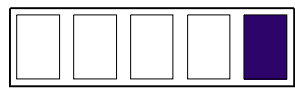




OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE (S-VHS: SP MODE) (TBC SW, ON)

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

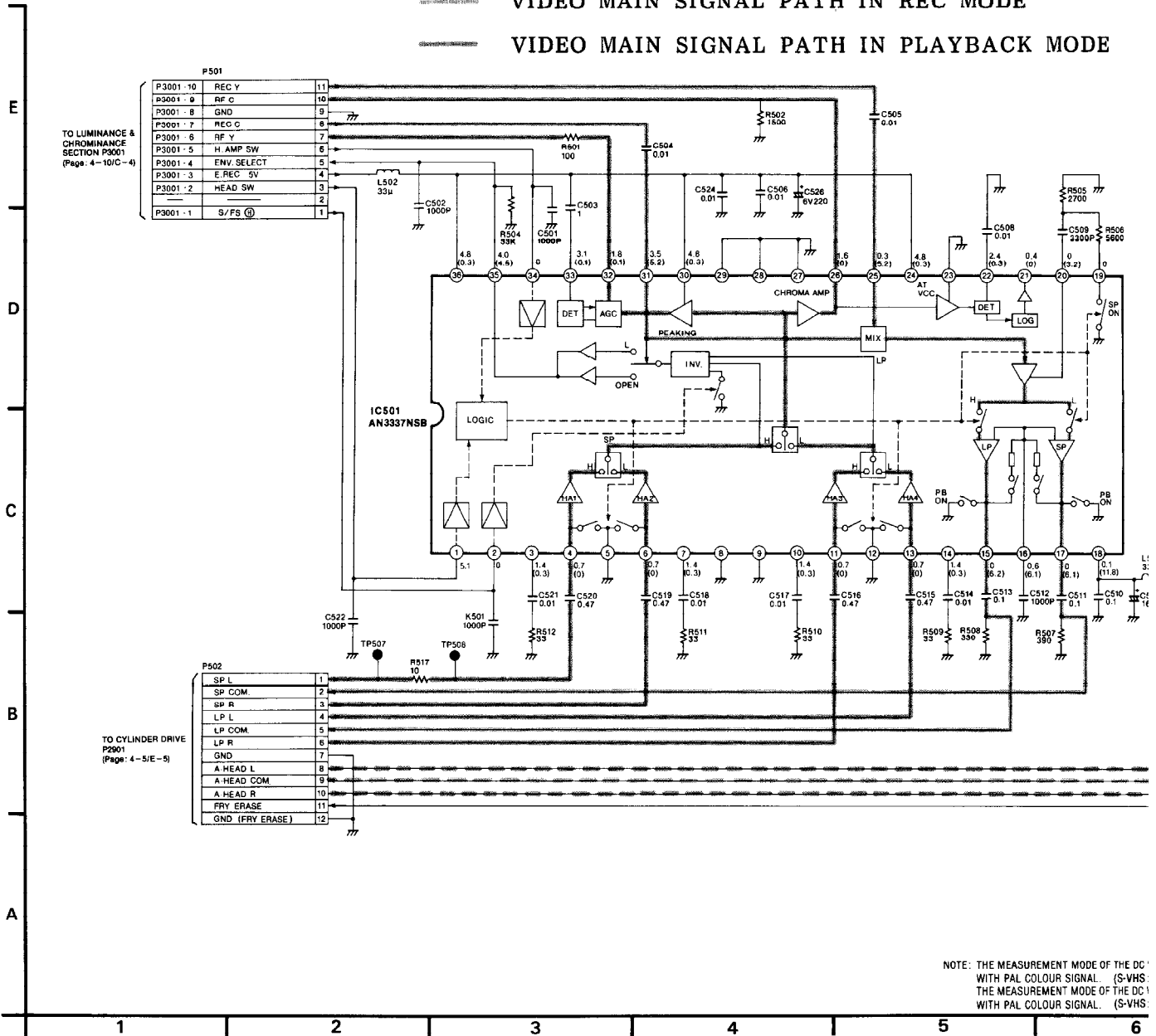
21 | 22 | 23 | 24 | 25 | 26



# 4-11. HEAD AMP SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

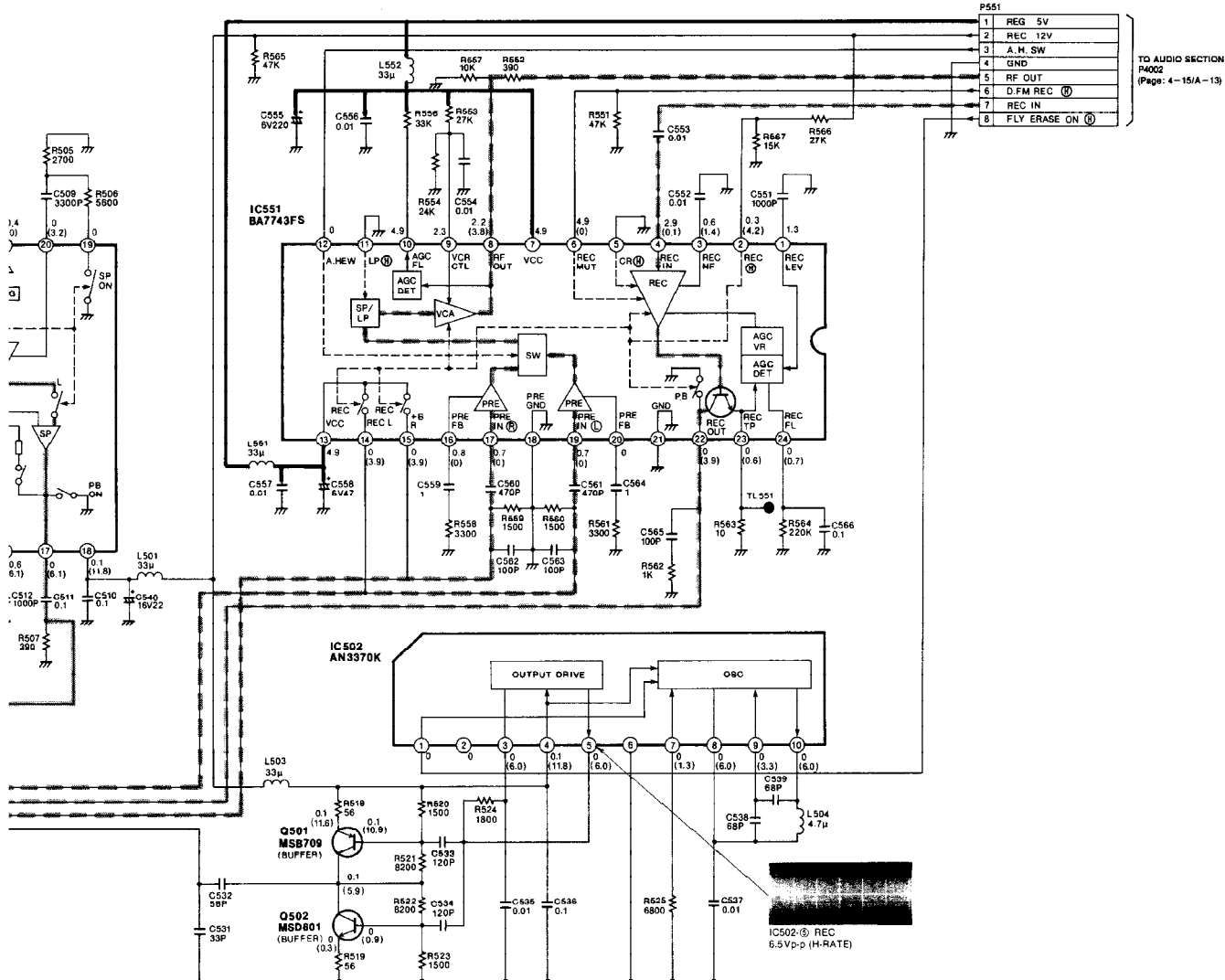


NOTE: THE MEASUREMENT MODE OF THE DC 1 WITH PAL COLOUR SIGNAL. (S-VHS: THE MEASUREMENT MODE OF THE DC 1 WITH PAL COLOUR SIGNAL. (S-VHS:



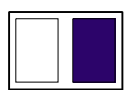
Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE

Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

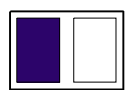
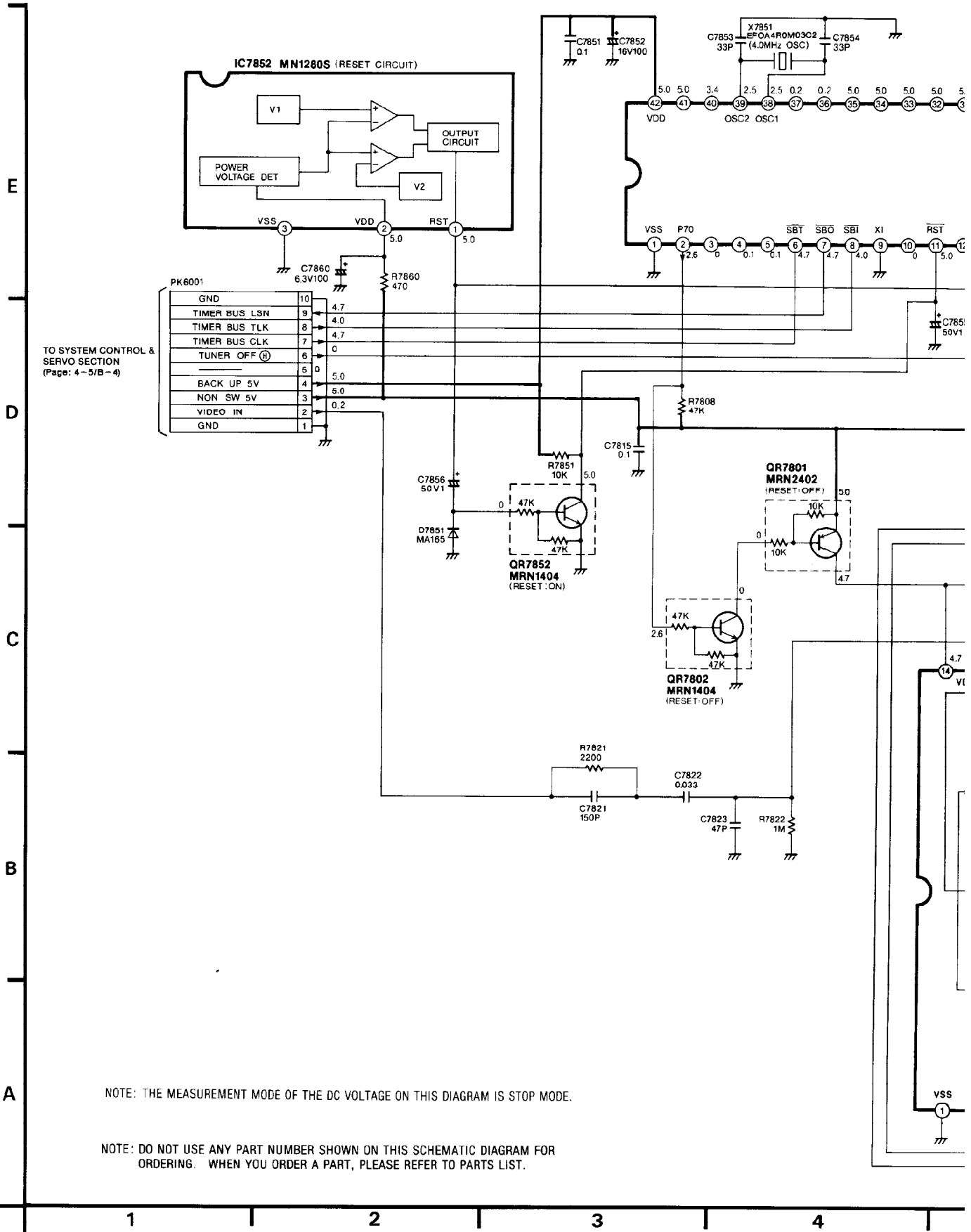


MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE  
 COLOUR SIGNAL (S-VHS: SP MODE)  
 MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE  
 COLOUR SIGNAL (S-VHS: SP MODE)

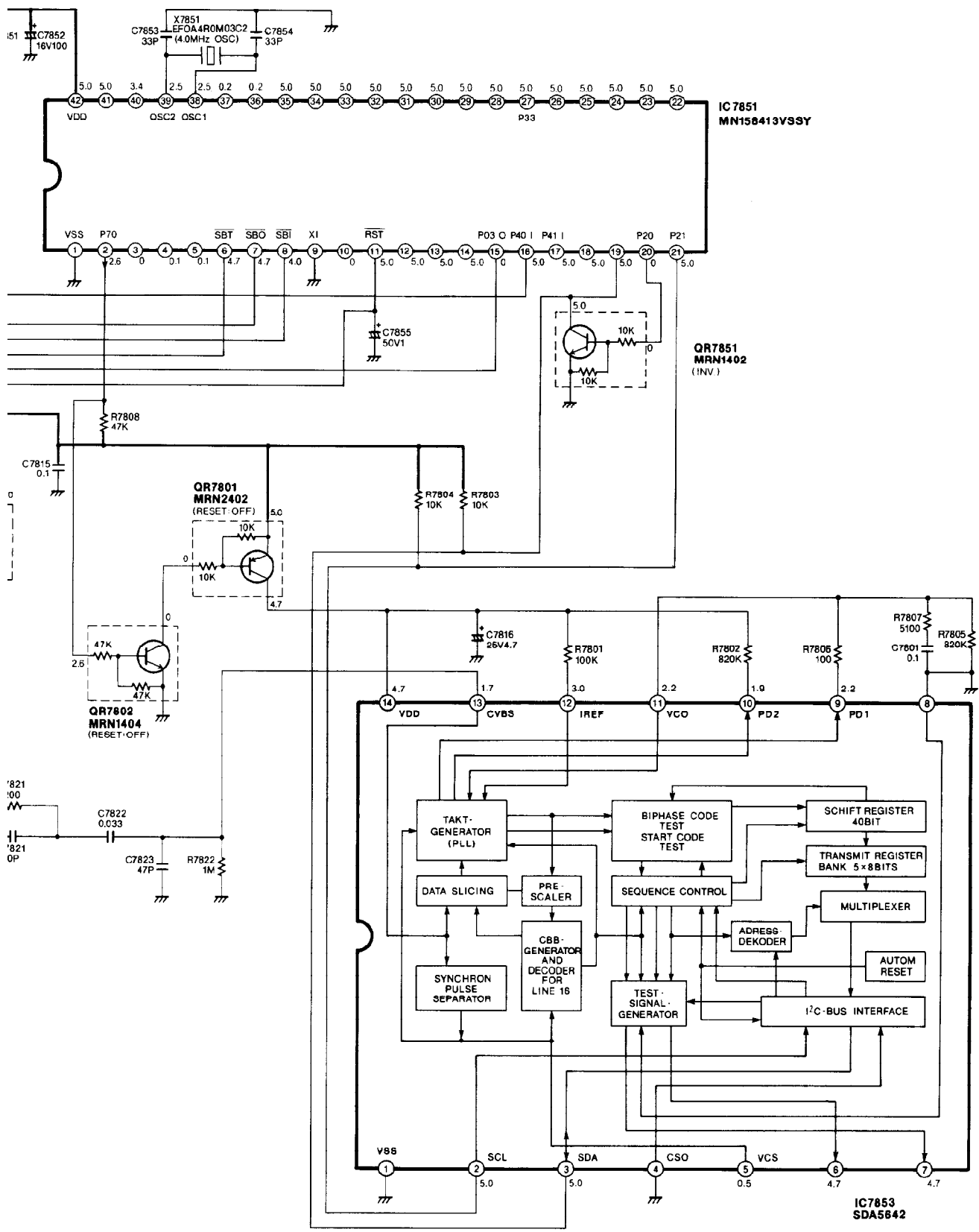
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.



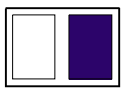
# 4-12. VPS PACK SCHEMATIC DIAGRAM



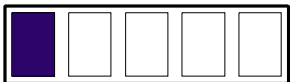
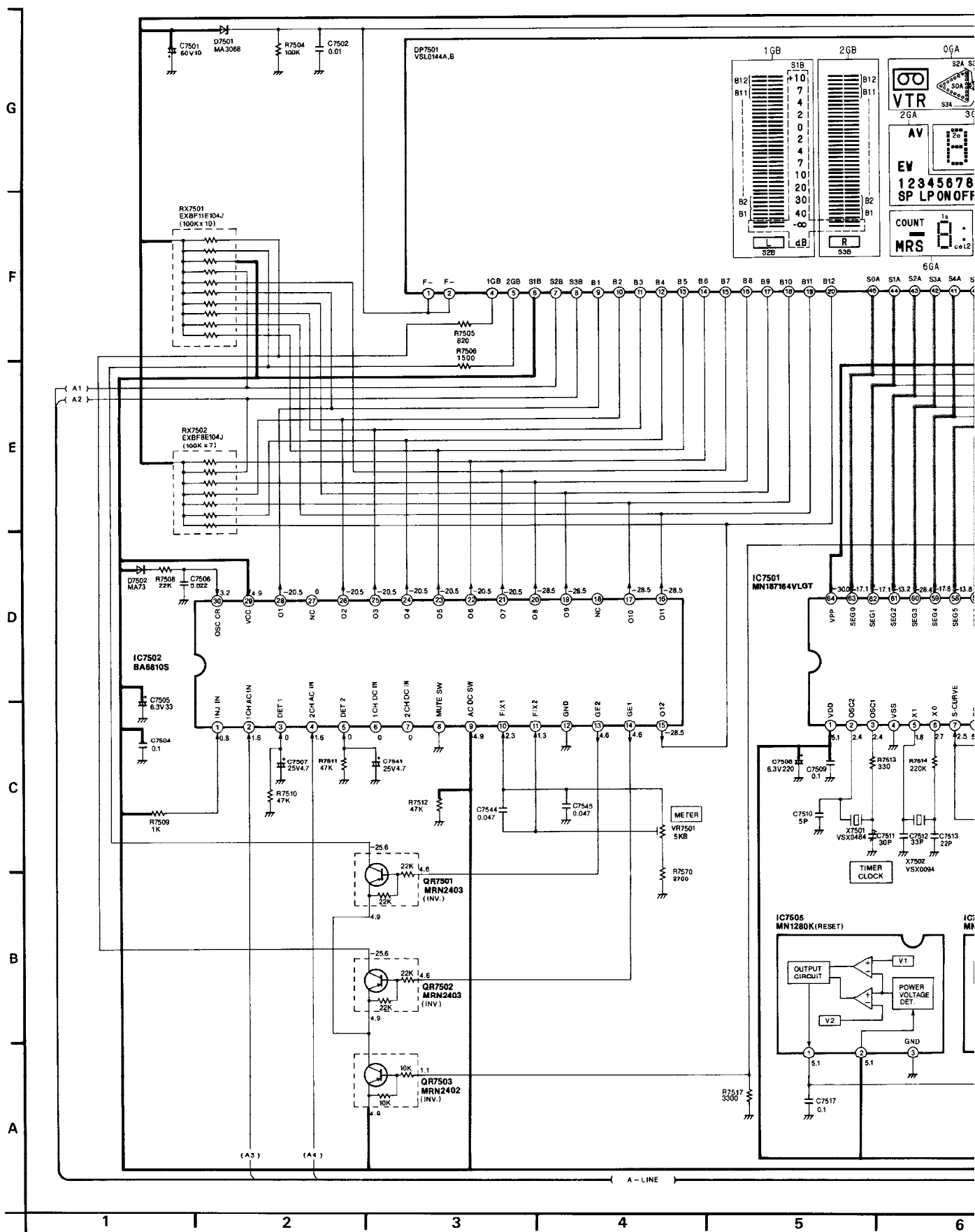




3 | 4 | 5 | 6 | 7

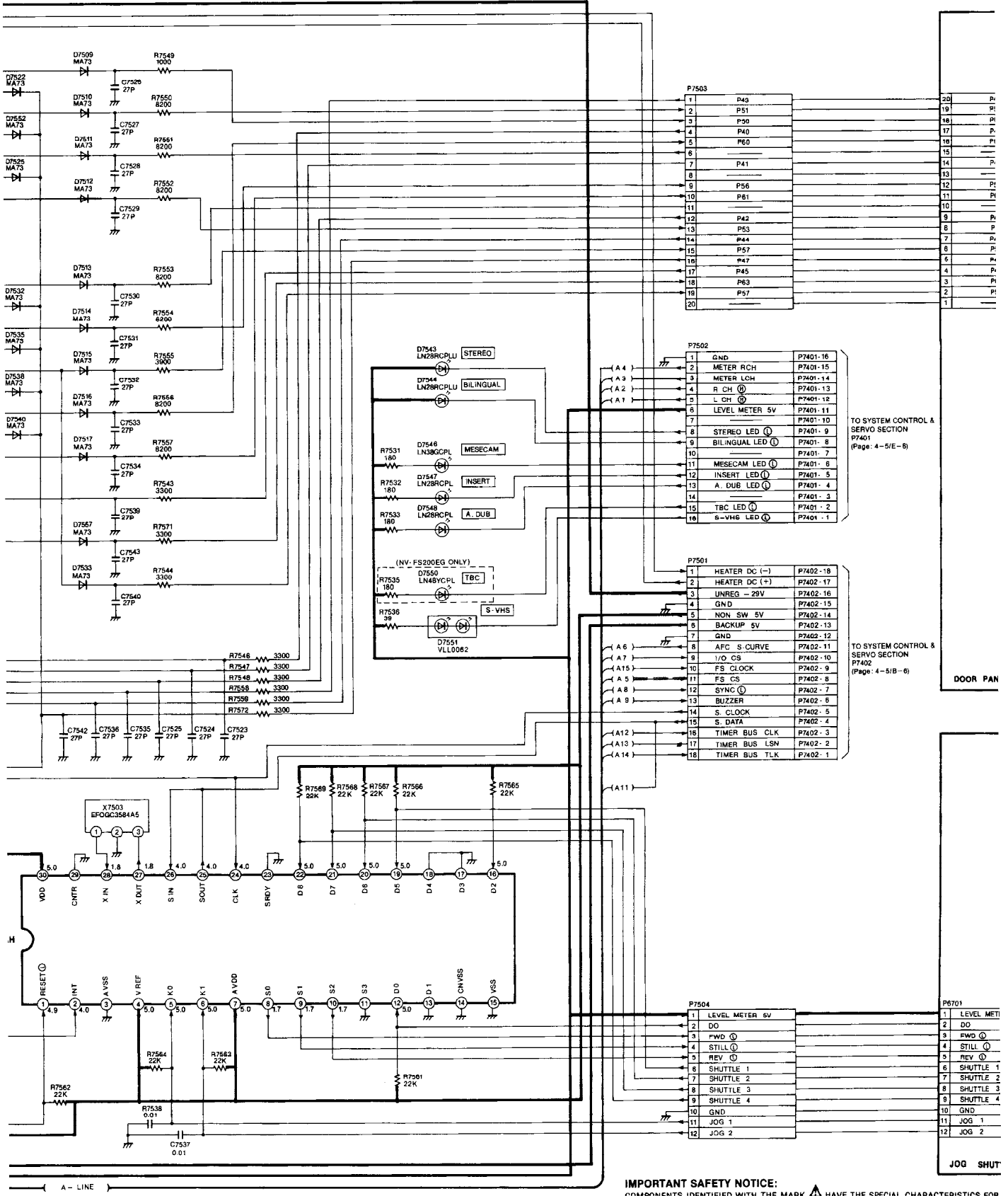


# 4-13. TIMER & VR SCHEMATIC DIAGRAM





# UNE CONTROL SIGNAL



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

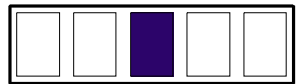
12

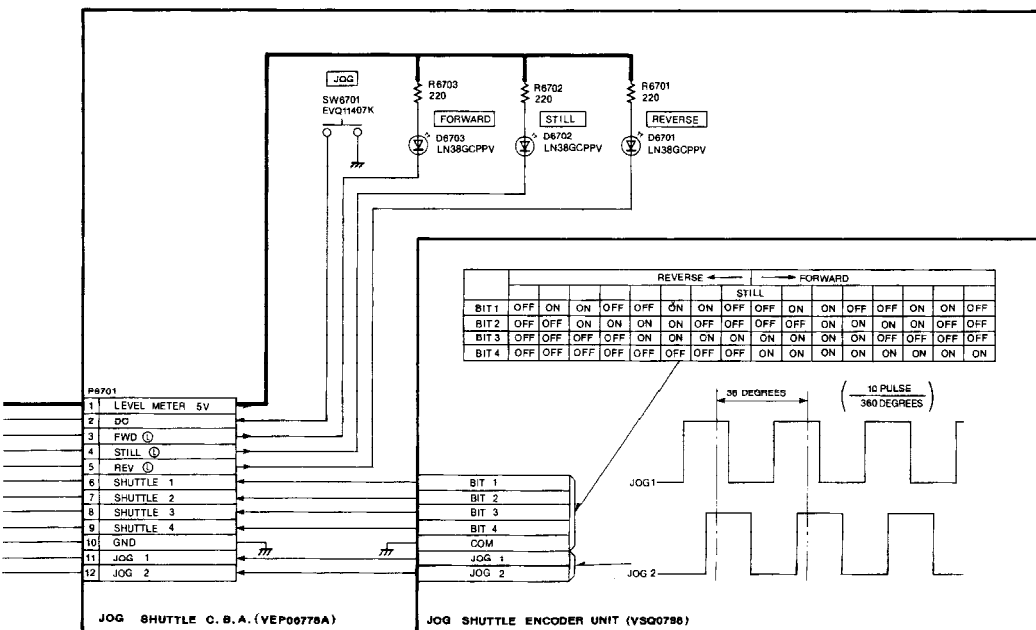
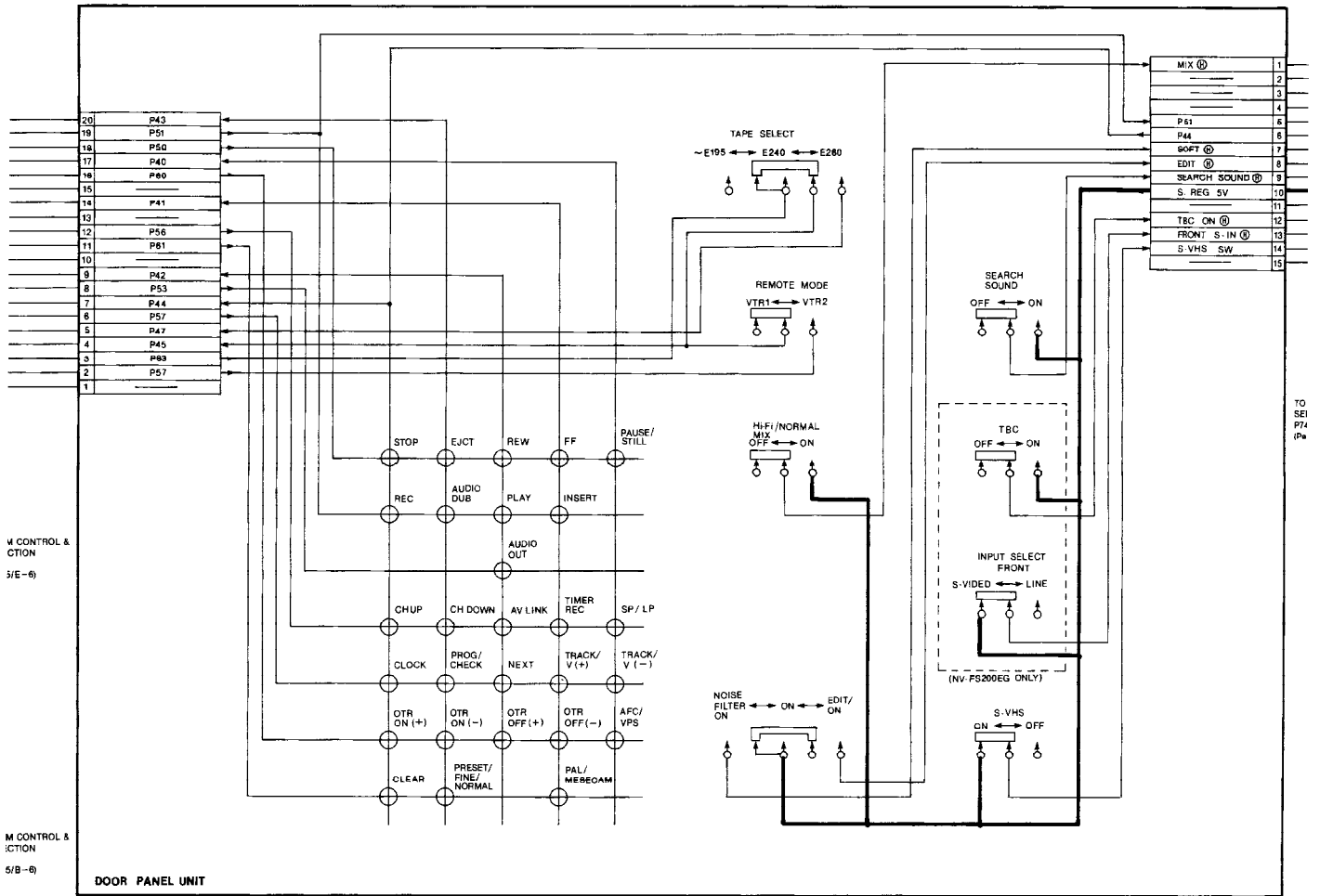
13

14

15

16





SPECIAL CHARACTERISTICS FOR SAFETY. THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (S-VHS: SP MODE)

17

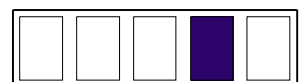
18

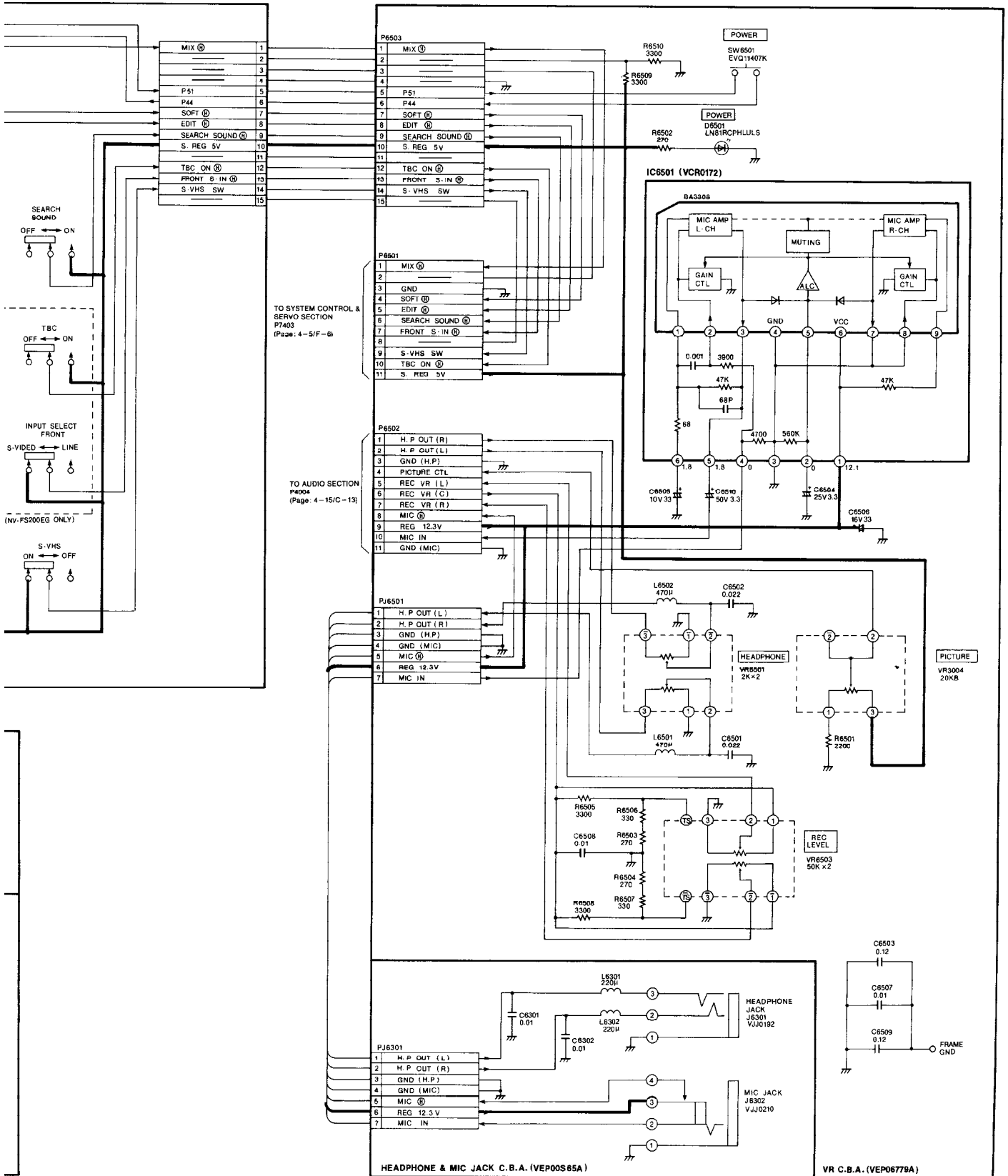
19

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2





STOP MODE. (S-VHS: 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.

21

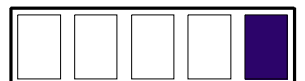
22

23

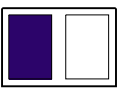
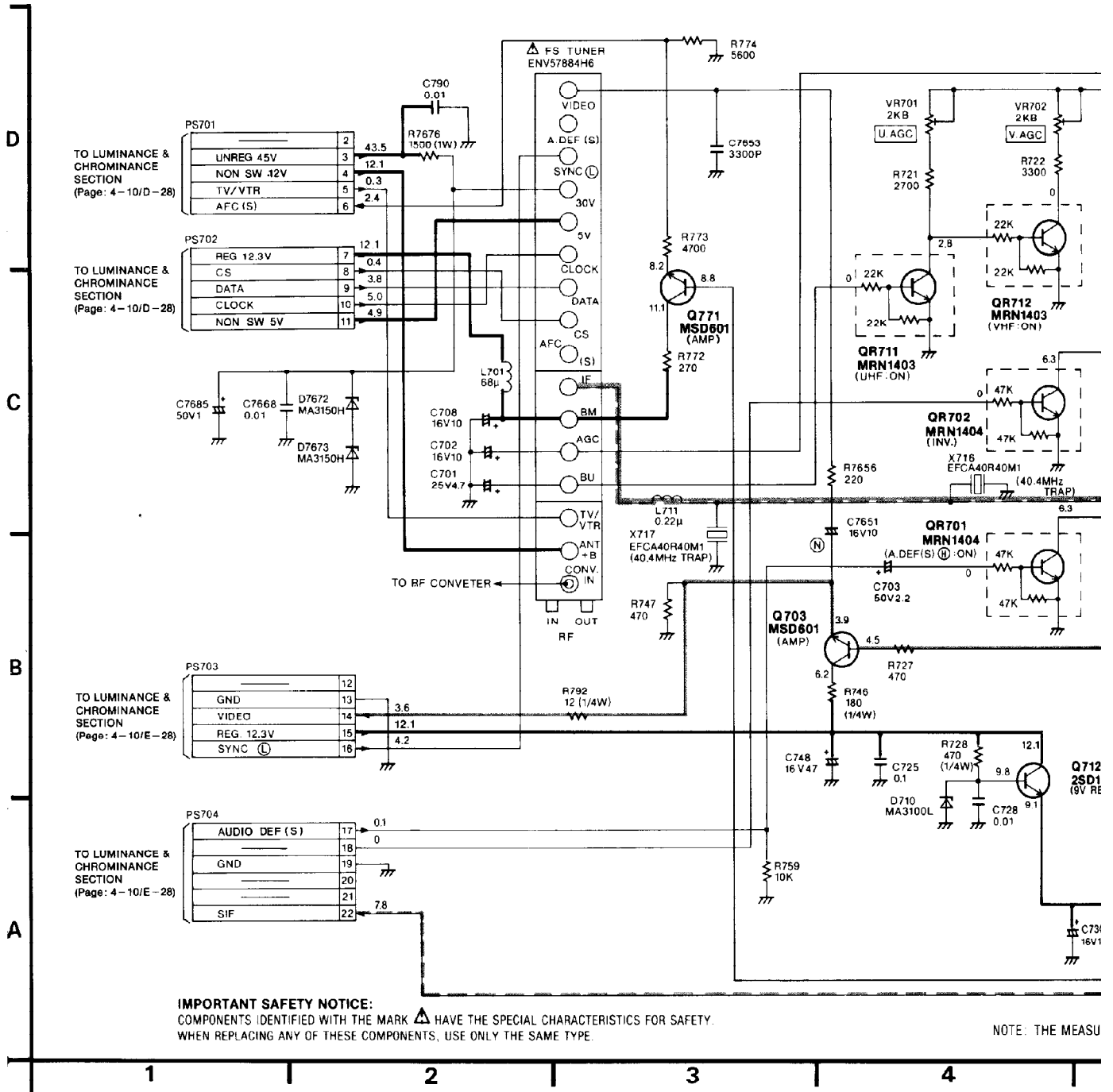
24

25

26

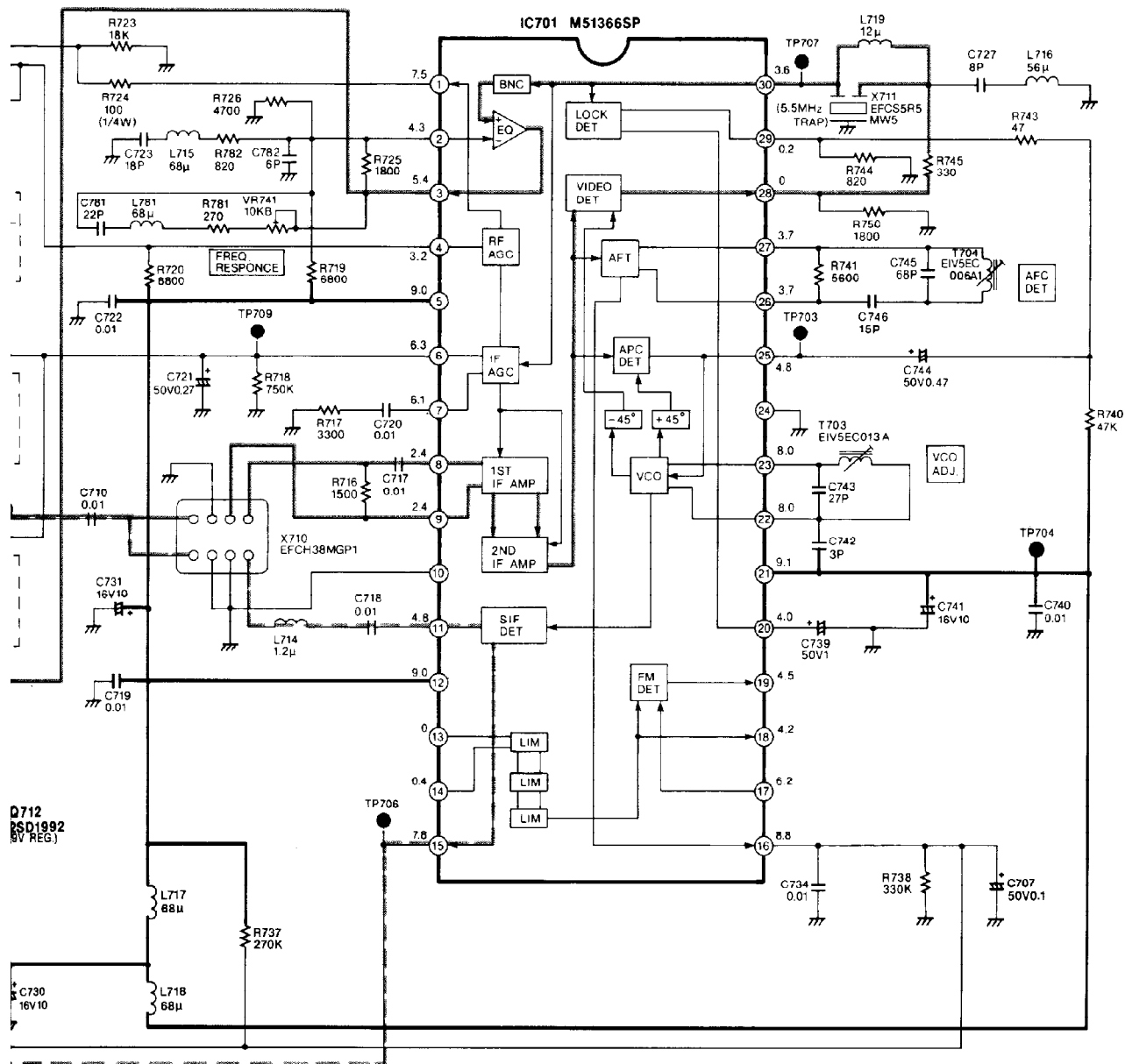


# 4-14. TV DEMODULATOR PACK SCHEMATIC DIAGRAM



VIDEO SIGNAL PATH

AUDIO SIGNAL PATH



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

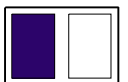
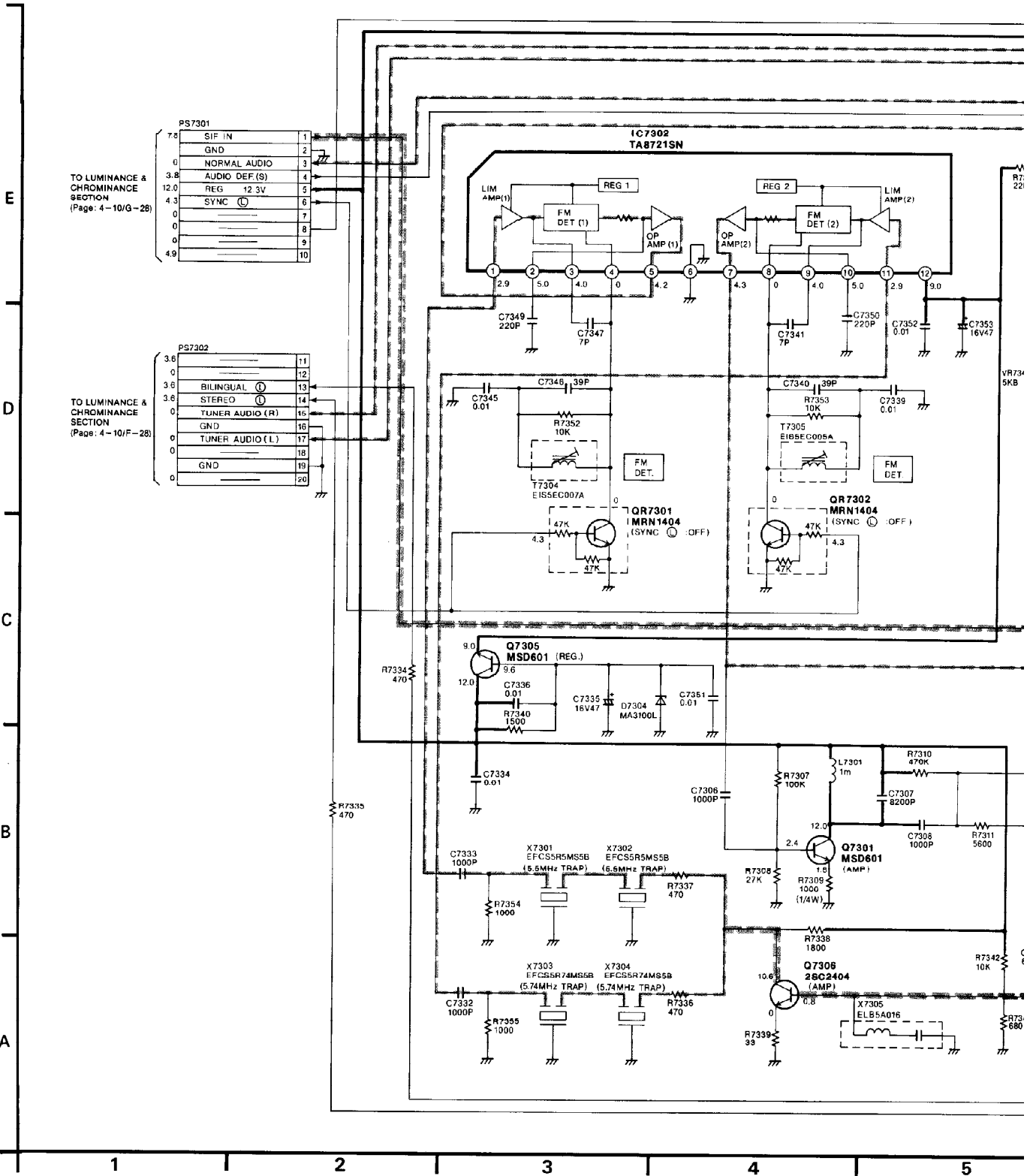
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.





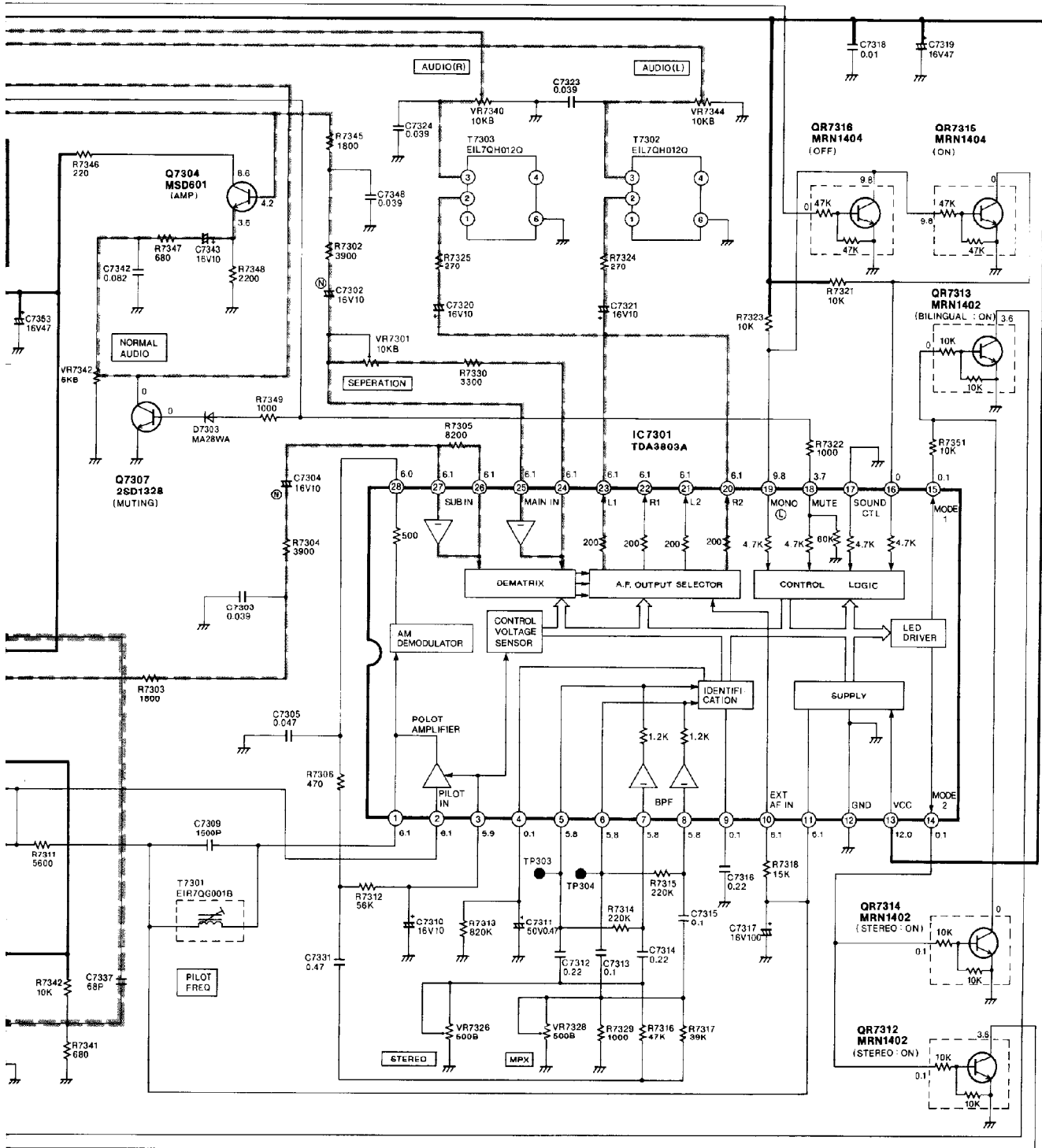
# 4-15. DECODER PACK SCHEMATIC DIAGRAM

AUDIO MAIN



O MAIN SIGNAL PATH

AUDIO SUB SIGNAL PATH



NOTE: THE MEASUREMENT MODE OF THE 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.

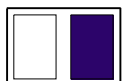
5

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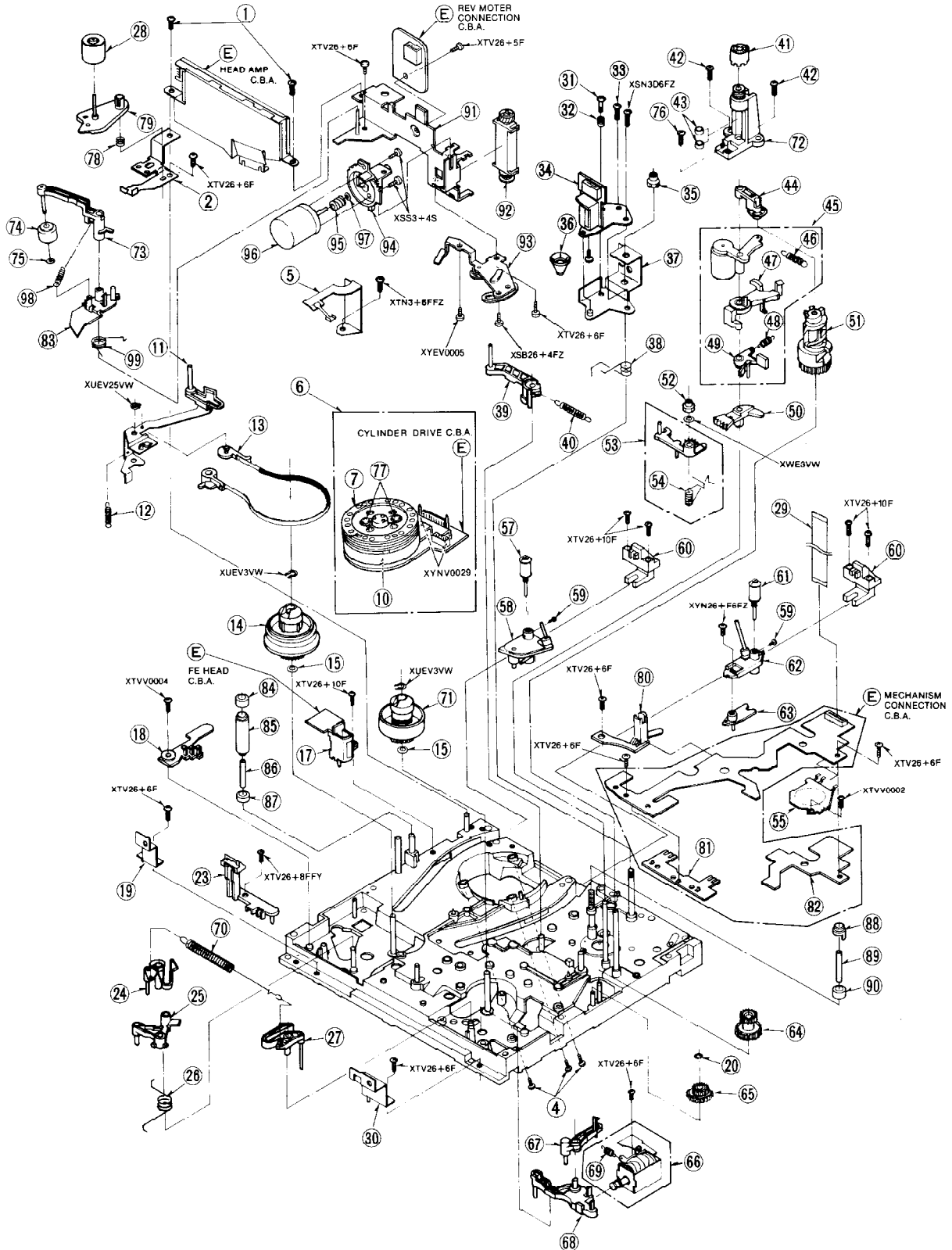
9



# SECTION 5 EXPLODED VIEWS & PARTS LIST

## 5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

### ❶ CHASSIS PARTS SECTION (1)

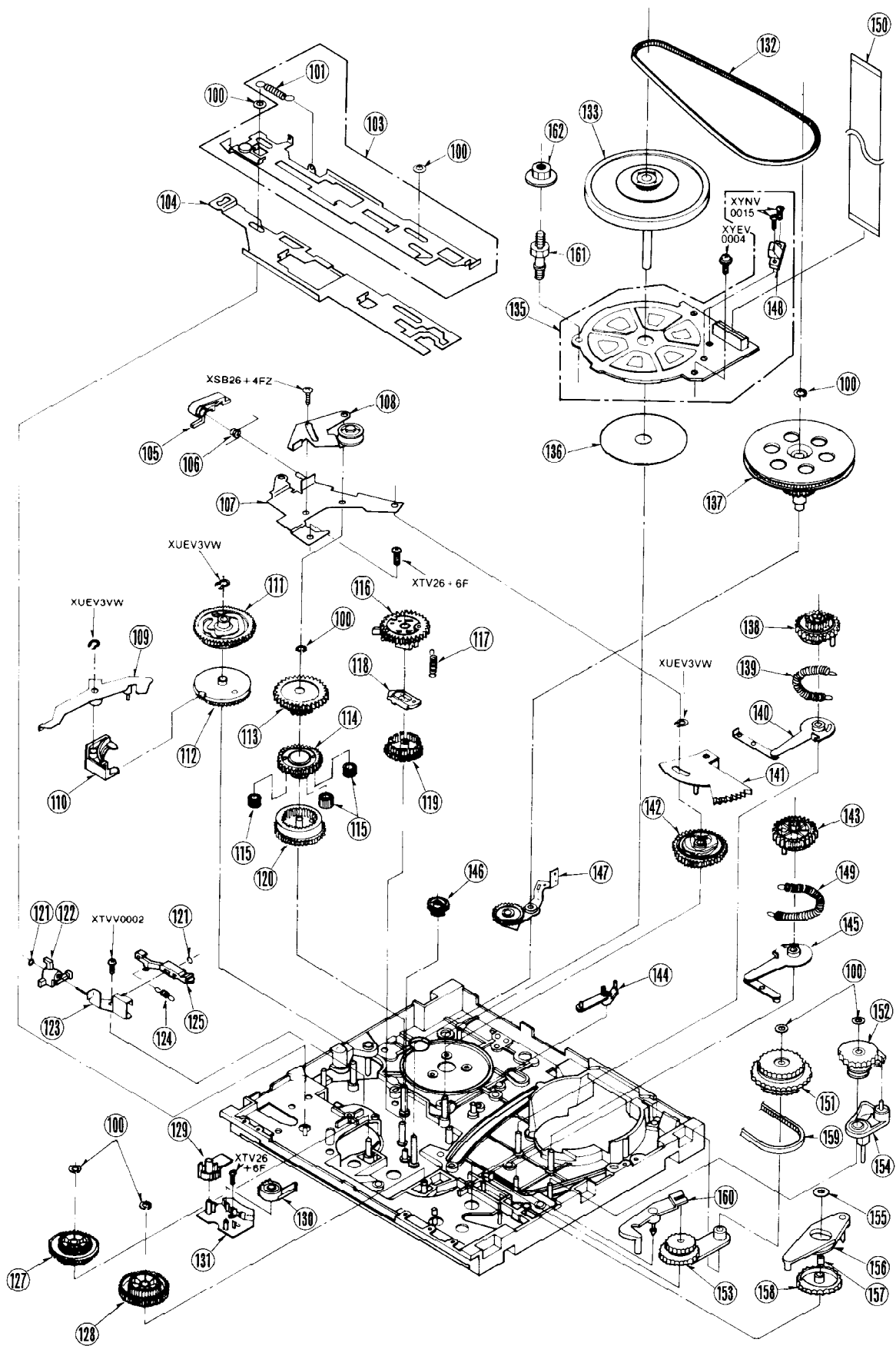


Note:1.\* Be sure to make your orders of replacement parts according to this list.  
 2.IMPORTANT SAFETY NOTICE  
 Components identified with the mark (<!) have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1(1)	VHDO418	HEAD AMP SET SCREW	2	
2(1)	VMA7174	HEAD AMP MOUNT ANGLE	1	
4(1)	VHDO342	CYLINDER SCREW	3	
5(1)	VXA2702	EARTH PLATE UNIT	1	
6(1)	VEG0769	CYLINDER UNIT	1	<!>
7(1)	VEHO467	UPPER CYLINDER UNIT	1	
10(1)	VSC2188	CYLINDER C.B.A. SHIELD PLATE	1	
11(1)	VXL1855	TENSION ARM (1) UNIT	1	
12(1)	VMB1563	TENSION SPRING	1	
13(1)	VXZ0267	TENSION BAND UNIT	1	
14(1)	VXR0179	SUPPLY REEL TABLE UNIT	1	
15(1)	VMX1171	REEL WASHER (0.5mm)	2	
15(1)	VMX1239	REEL WASHER (0.3mm)	2	
15(1)	VMX1238	REEL WASHER (0.2mm)	2	
17(1)	VBS0038	FE HEAD	1	
18(1)	VMD1316	TENSION SPRING HOOK	1	
19(1)	VMA6895	MOUNT ANGLE (L)	1	
20(1)	VMD1079	CUT WASHER	1	
23(1)	VES0486	SAFETY SW	1	
24(1)	VXZ0259	SUPPLY MAIN BRAKE UNIT	1	
25(1)	VXZ0274	SUPPLY SOFT BRAKE(1)UNIT	1	
26(1)	VMB1564	SUPPLY SOFT BRAKE SPRING	1	
27(1)	VXZ0262	TAKE UP MAIN BRAKE UNIT	1	
28(1)	VXP1092	IMPEDANCE ROLLER UNIT	1	
29(1)	VWJ0357	FLEXIBLE CADE (15P)	1	(P6001-P1504)
30(1)	VMA6896	MOUNT ANGLE (R)	1	
31(1)	VHDO322	ADJUST SCREW	1	
32(1)	VMB1251	ADJUST SPRING	1	
33(1)	VHDO089B	AZIMUTH ADJUST SCREW	1	
34(1)	VED0082	A/C HEAD (1) UNIT	1	
35(1)	VHNO063	M4 NYLON NUT	1	
36(1)	VHNO110	ADJUST NUT	1	
37(1)	VMA7831	HEAD BASE	1	
38(1)	VMB1567	A/C HEAD SPRING	1	
39(1)	VXL1857	SUB LOADING ARM (1) UNIT	1	
40(1)	VMB1566	SUB POST SPRING	1	
41(1)	VXQ0006	THRUST SCREW UNIT	1	
42(1)	VHDO317	HOUSING SCREW	2	
43(1)	VMX1033	OIL SEAL	2	
44(1)	VMX1353	PINCH CAM CAP	1	
45(1)	VXL1858	PRESSURE ROLLER UNIT	1	
46(1)	VMB1941	PIN PRESSURE SPRING	1	
47(1)	VML2232	PINCH PRESSURE ARM	1	
48(1)	VMB1569	PINCH PRESSURE ARM RELEASE SPRING	1	
49(1)	VML1874	PINCH LIFT ARM	1	
50(1)	VDG0597	P5 PULL OUT SECTOR GEAR	1	
51(1)	VDG0421	PINCH CAM	1	
52(1)	VHDO045	M3 NYLON NUT	1	
53(1)	VXL2027	P5 UNIT	1	
54(1)	VMB2718	P5 SPRING	1	
55(1)	VSS0175	MODE SW	1	
57(1)	VXP1093	ROLLER POST (S) UNIT	1	
58(1)	VXA4106	INCLIND BASE (S)(1)UNIT	1	
59(1)	VHDO133	ROLLER POST SCREW	2	
60(1)	VMD0910	POST STOPPER	2	
61(1)	VXP1094	ROLLER POST (T) UNIT	1	
62(1)	VXA3876	INCLIND BASE(T)(1)UNIT	1	
63(1)	VXA2687	INCLIND ADJUST PLATE UNIT	1	
64(1)	VDG0483	PINCH SPEED DOWN GEAR	1	
65(1)	VDG0664	CONNECTION GEAR	1	
66(1)	VEK3347	SOLENOID UNIT	1	
67(1)	VXA2692	KICK ROD UNIT	1	
68(1)	VML2048	SOLENOID LEVER	1	
69(1)	VMB1553	KICK ROD SPRING	1	
70(1)	VMB2012	MAIN BRAKE SPRING	1	

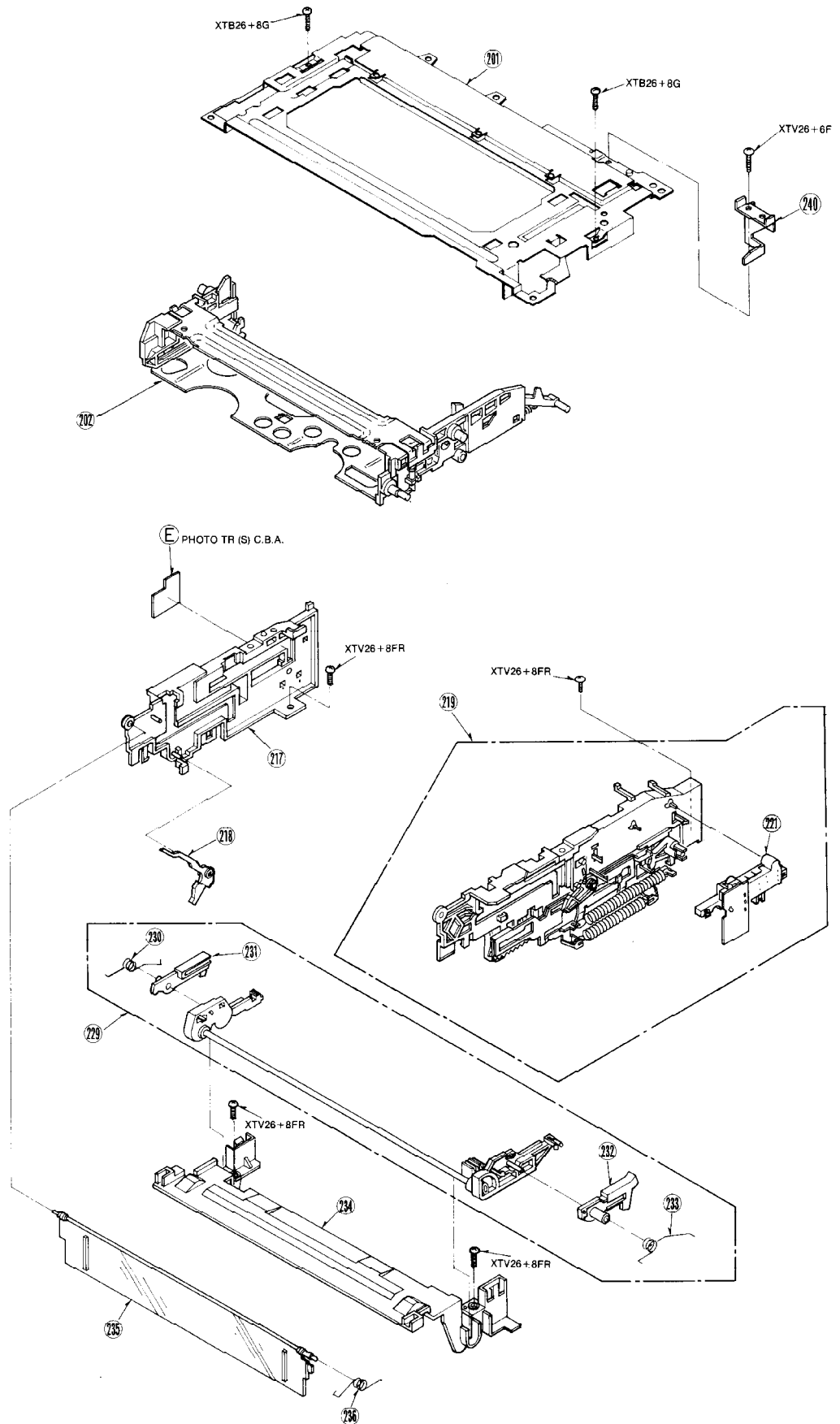
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
71(1)	VXR0176	TAKE UP REEL TABLE UNIT	1	
72(1)	VXD0101	HOUSING UNIT	1	
73(1)	VXL2066	CLEANNER ARM (2) UNIT	1	
74(1)	VXP1341	CLEANNER ROLLER UNIT	1	
75(1)	VMX1061	SNAP WASHER (A)	1	
76(1)	VHDO374	HOUSING SCREW	1	
77(1)	VHDO553	UPPER CYLINDER SCREW	2	
78(1)	VMB1741	IMPEDANCE ARM SPRING	1	
79(1)	VML2308	IMPEDANCE ROLLER ARM	1	
80(1)	VXA3520	LED HOLDER UNIT	1	
81(1)	VMA7829	REINFORCEMENT PLATE (F)	1	
82(1)	VMA7830	REINFORCEMENT PLATE (R)	1	
83(1)	VML2510	CLEANNER ARM (B)	1	
84(1)	VMX1088	SUPPLY UPPER LIMITER	1	
85(1)	VDP1304	SUPPLY ROLLER	1	
86(1)	VMX1581	P1 COLLAR	1	
87(1)	VMX1533	SUPPLY LOWER LIMITER	1	
88(1)	VMX1544	P4 UPPER LIMITER	1	
89(1)	VMX1568	P4 SLEEVE	1	
90(1)	VMX1534	P4 LOWER LIMITER	1	
91(1)	VXA4317	MOTOR MOUNT PLATE UNIT	1	
92(1)	VXA3517	WORM WHEEL BEARING UNIT	1	
93(1)	VXA4315	TENSION PULLEY BASE (A) UNIT	1	
94(1)	VXA3564	REEL MOTOR BRACKET UNIT	1	
95(1)	VXP1208	WORM GEAR UNIT	1	
96(1)	VEM0320	REV MOTOR	1	
97(1)	VMX1734	WORM WASHER	1	
98(1)	VMB2263	CLEANNER ARM SPRING (A)	1	
99(1)	VMB2264	CLEANNER ARM SPRING (B)	1	

## 2 CHASSIS PARTS SECTION (2)





### ③ CASSETTE UP MECHANISM SECTION

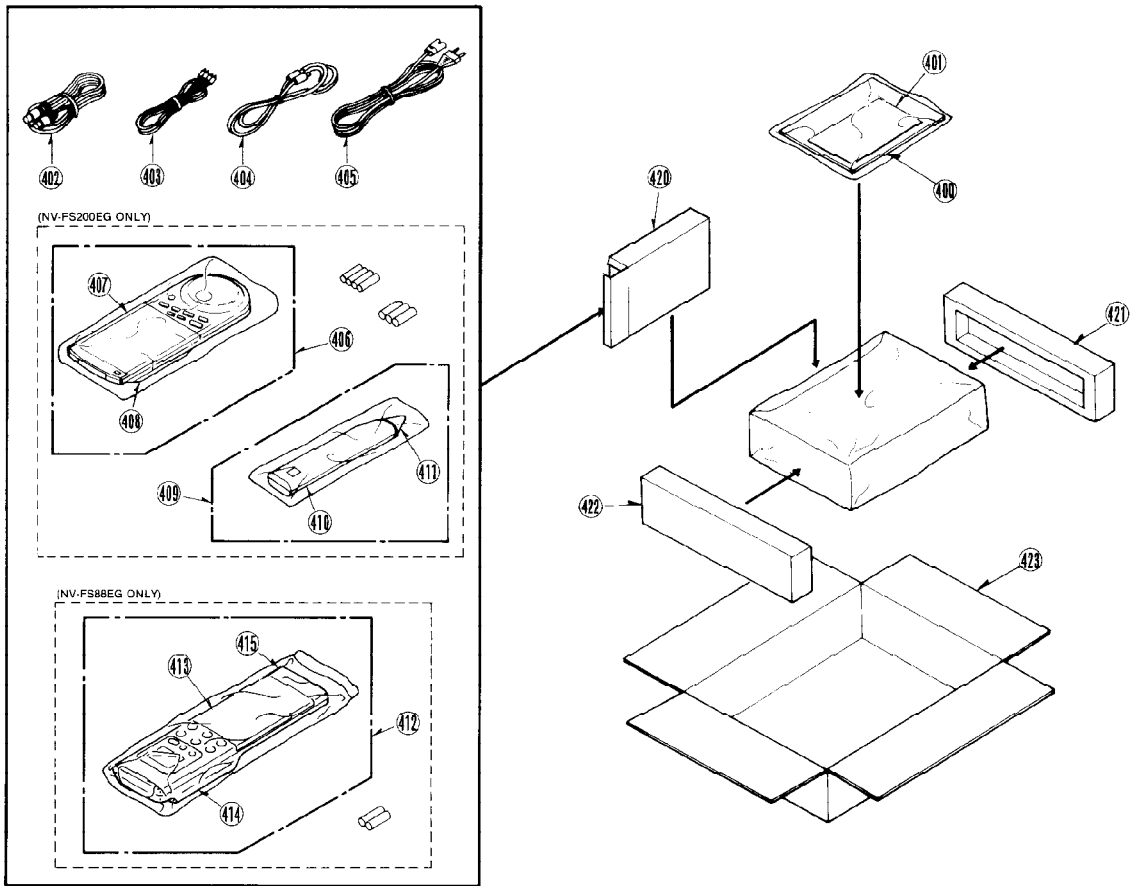








## 4 CASING PARTS SECTION



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
400(5)	VQT4597	OPERATING INSTRUCTIONS (ENGLISH/GERMAN)	1 <(!)>	NV-FS200EG
400(5)	VQT4598	OPERATING INSTRUCTIONS (FRENCH/DUTCH)	1 <(!)>	NV-FS200EG
400(5)	VQT4599	OPERATING INSTRUCTIONS (ITALIAN/ARABIC)	1 <(!)>	NV-FS200EG
400(5)	VQT4603	OPERATING INSTRUCTIONS (ENGLISH/GERMAN)	1 <(!)>	NV-FS88EG
400(5)	VQT4604	OPERATING INSTRUCTIONS (FRENCH/DUTCH)	1 <(!)>	NV-FS88EG
400(5)	VQT4605	OPERATING INSTRUCTIONS (ITALIAN)	1 <(!)>	NV-FS88EG
401(5)	VQC1859	PROGRAMME SHEET	1	
402(5)	VJA0710	DIN RF CABLE	1	
403(5)	VJA0231	AUDIO CABLE	1	
404(5)	VJA0658	S-VIDEO 4P CABLE	1	
405(5)	VJA0664	AC CORD	1 <(!)>	
406(5)	VEQ1392	JOG REMOTE CONTROLLER	1	NV-FS200EG
407(5)	VGP2891	DOOR PANEL (VEQ1392)	1	NV-FS200EG
408(5)	VKF1714	BATTERY COVER (VEQ1392)	1	NV-FS200EG
409(5)	VEQ1325	DIGITAL SCANNER	1	NV-FS200EG
410(5)	VKF1024	BATTERY COVER (VEQ1325)	1	NV-FS200EG
411(5)	VKM1332	SENSOR CAP (VEQ1325)	1	NV-FS200EG
412(5)	VEQ1389	REMOTE CONTROLLER (BUILD IN DIGITAL SCANNER)	1	NV-FS88EG
413(5)	VCP2797	DOOR PANEL (VEQ1389)	1	NV-FS88EG

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
414(5)	VKF1658	BATTERY COVER (VEQ1389)	1	NV-FS88EG
415(5)	VEQ2399	SENSOR CAP (VEQ1389)	1	NV-FS88EG
420(5)	VPK0834	ACCESSORIES PACKING	1	NV-FS200EG
420(5)	VPK0825	ACCESSORIES PACKING	1	NV-FS88EG
421(5)	VPN3402	CUSHION (R)	1	
422(5)	VPN3403	CUSHION (L)	1	
423(5)	VPC6390	PACKING	1	NV-FS200EG
423(5)	VPC6392	PACKING	1	NV-FS88EG
		SERVICING FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	1	
	VFK0335	RETAINING RING REMOVER (3mm/4mm)	1	
	VFK0387	TENSION POST ADJUSTMENT PLATE	1	
	VFK0191	POST ADJUSTMENT PLATE	1	
	VFK0190	REEL TABLE HEIGHT GAUGE	1	
	VFK0328	H-POSITION ADJUSTMENT SCREWDRIVER	1	
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK62	FAN TYPE TENSION GAUGE	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK0343	CHECK LIGHT	1	
	VFK0344	HEIGHT ADJUSTMENT FIXTURE	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLYTONE GREASE	1	
	VFK0341	UPPER CYLINDER REMOVER	1	
	VFK0582	8 PIN EXTENSION CABLE	1	
	VFK0583	9 PIN EXTENSION CABLE	1	
	VFK0584	11 PIN EXTENSION CABLE	1	
	VFK0585	12 PIN EXTENSION CABLE	1	
	VFK0586	15 PIN EXTENSION CABLE	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=ppf.  
 4. The P.C. Board units marked with (!) show below the main assembled parts.  
 5. Printed circuit board assembly with mark (NLA) is no longer available after discontinuation of the product.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEPO6777A	MAIN C.B.A.	1	(NLA)NV-FS20OEG INCLUDING THE SERVO PACK C.B.A. (VEPO2389A), INPUT/OUTPUT PACK C.B.A. (VEPO3892A), LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3894A), SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3895A), AUDIO PACK C.B.A. (VEPO4361E), VPS PACK C.B.A. (VEPO7575A), TV DEMODULATOR PACK C.B.A. (VEPO7643E), DECODER PACK C.B.A. (VEPO7671A).
	VEPO2389A	SERVO PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO3892A	INPUT/OUTPUT PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO3894A	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO3895A	SUB LUMINANCE & CHROMINANCE PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A), INCLUDING THE 1H DELAY CCD UNIT (VEPO3680B).
	VEPO3680B	1H DELAY CCD UNIT	1	(NLA)NV-FS20OEG INCLUDED IN SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3895A).
	VEPO4361E	AUDIO PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO7575A	VPS PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO7643E	TV DEMODULATOR PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO7671A	DECODER PACK C.B.A.	1	(NLA)NV-FS20OEG INCLUDED IN MAIN C.B.A. (VEPO6777A).
	VEPO6777C	MAIN C.B.A.	1	(NLA)NV-FS88EG

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
				INCLUDING THE SERVO PACK C.B.A. (VEPO2389A), INPUT/OUTPUT PACK C.B.A. (VEPO3892B), LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3894A), SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3895B), AUDIO PACK C.B.A. (VEPO4361E), VPS PACK C.B.A. (VEPO7575A), TV DEMODULATOR PACK C.B.A. (VEPO7643E), DECODER PACK C.B.A. (VEPO7671A).
	VEPO2389A	SERVO PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO3892B	INPUT/OUTPUT PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO3894A	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO3895B	SUB LUMINANCE & CHROMINANCE PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO4361E	AUDIO PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO7575A	VPS PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO7643E	TV DEMODULATOR PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO7671A	DECODER PACK C.B.A.	1	(NLA)NV-FS88EG INCLUDED IN MAIN C.B.A. (VEPO6777C).
	VEPO5170F	HFAD AMP C.B.A.	1	(NLA)
	VEPO6779A	VR C.B.A.	1	(NLA) INCLUDING THE HEAD PHONE C.B.A. (VPO0565A).
	VEPO0565A	HEAD PHONE C.B.A.	1	(NLA) INCLUDED IN VR C.B.A. (VEPO6779A).
	VEPO7664A	TIMER C.B.A.	1	(NLA) (!)NV-FS20OEG
	VEPO7664C	TIMER C.B.A.	1	(NLA) (!)NV-FS88EG
	VEPO6778A	JOG C.B.A.	1	(NLA)
	VEPO1381J	POWER C.B.A.	1	(NLA) (!)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VEPO0S21A	S TERMINAL C.B.A.	1	(NLA)
	VEPOOP23B	CYLINDER DRIVE C.B.A.	1	(NLA)
	VEPO3893A	TBC C.B.A.	1	(NLA)NV-FS20OEG
	VEPO4359A	FRONT INPUT C.B.A.	1	(NLA)NV-FS20OEG
	VEPOOK88C	FE HEAD C.B.A.	1	(NLA)
	VEPOOP51A	REV MOTOR CONNECTION C.B.A.	1	(NLA)
	VXA3825	MECHANISM CONNECTION C.B.A.	1	(NLA)
	VEK3578	PHOTO Tr. (S) C.B.A.	1	(NLA)
	-----	PHOTO Tr. (T) C.B.A.	1	(NLA) INCLUDED IN SLIDE SM UNIT (VXA4642).
	ENC17984	RF CONVERTER	1	<1>
	ENV57884H6	TUNER	1	<1>
F1101,02	XBA2C16T80	FUSE	2	<1>
	VEPO6777A	MAIN C.B.A.		(NLA)NV-FS20OEG
		CONNECTORS		
BP1004	VJFO094	CONNECTOR	1	
		CAPACITORS		
C303	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C305	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C306	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C307	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C308	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C309	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C310	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C311	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C312	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C319	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C320	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C321	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C322	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C323	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C324	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C325	ECEA1EK4R7	E.CAPACITOR 50V 4.7U	1	
C326	ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C327-30	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C331,32	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C333	ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C334-36	ECEA1CK100	E.CAPACITOR 16V 10U	3	
C337	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C338	ECUM1H104ZFN	C.CAPACITOR 50V	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C339	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C340	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C341	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C343	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C344	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C345	ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C346	ECQV1H470JZ	P.CAPACITOR 50V 47P	1	
C701	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C703	ECFA1HK7R2	E.CAPACITOR 50V 2.2U	1	
C707	ECEA1HKOR1	E.CAPACITOR 50V 0.1U	1	
C708	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C710	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721	ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C723	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C725	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C727	ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C728	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C734	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C739	ECEA1HK101	E.CAPACITOR 50V 1U	1	
C740	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742	ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743	ECUM1H270RSN	C.CAPACITOR CH 50V 27P	1	
C744	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745	ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C781	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C782	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C790	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C806	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C807	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C808	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C810	ECEA1HKR2	E.CAPACITOR 50V 2.2U	1	
C811	ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C812	ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C813	ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C814-16	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C817	ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C818	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C819	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C820	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C821	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C822	ECQV1H020D41	TRIMMER	1	
C823	ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C824	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C825	ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C826	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C827	ECEA1HK101	E.CAPACITOR 50V 1U	1	
C828	ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C829-31	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C832,33	ECUM1H104ZFN	C.CAPACITOR 50V	2	
C834	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C835	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C836	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C837	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C838,39	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C840	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C841	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C842	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C843	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C844	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C845	ECQV1H332JH	P.CAPACITOR 50V 0.27U	1	
C846	ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C847	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C848	ECUM1H821KBN	C.CAPACITOR CH 50V 820P	1	
C849	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C850,51	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C852	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1003	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C3026	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C1004	ECEA1CK101	E. CAPACITOR 16V 100U	1		C3027, 28	ECEA1HK010	E. CAPACITOR 50V 1U	2	
C1009	ECEA1AK330	E. CAPACITOR 10V 33U	1		C3029	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C1010	ECEA1CK470	E. CAPACITOR 16V 47U	1		C3033	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C1701	ECKDZ471KB	E. CAPACITOR 500V 470P	1		C3034	ECAOJM331	E. CAPACITOR 6.3V 330U	1	
C1702	ECA1CM101	E. CAPACITOR 16V 100U	1		C3035	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C1703	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C3036	ECAOJM331	E. CAPACITOR 6.3V 330U	1	
C1704	ECEA1CK470	E. CAPACITOR 16V 47U	1		C3037	ECEA1HK010	E. CAPACITOR 50V 1U	1	
C1705	ECUM1H1042FN	C. CAPACITOR 50V	1		C3038	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C1706	ECA1VM100	E. CAPACITOR 35V 10U	1		C3039	ECUM1H1042FN	C. CAPACITOR 50V	1	
C1707	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C3040	ECAOJM221	E. CAPACITOR 6.3V 220U	1	
C1708	ECA1CM221	E. CAPACITOR 16V 220U	1		C3041	ECEA1AKN470	E. CAPACITOR 10V 47U	1	
C2001	ECEA1HK470	E. CAPACITOR 50V 4.7U	1		C3042	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C2002	ECEAOJK220	E. CAPACITOR 6.3V 22U	1		C3043	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2003	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	1		C3044	ECUM1H561KBN	C. CAPACITOR CH 50V 560P	1	
C2004	ECEA1HK3R3	E. CAPACITOR 50V 3.3U	1		C3301	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C2005	ECEA1CK100	E. CAPACITOR 16V 10U	1		C3302	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C2006	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1		C3304-08	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	5	
C2007	ECEAOJK470	E. CAPACITOR 6.3V 47U	1		C3309	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2008	ECEAOJK101	E. CAPACITOR 6.3V 100U	1		C3310	ECEAOJK470	E. CAPACITOR 6.3V 47U	1	
C2009	VCYE1C104MR1	S. CAPACITOR 16V 0.1U	1		C3313, 14	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C2010	ECEAOJK221	E. CAPACITOR 6.3V 220U	1		C3315	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C2011, 12	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	2		C3316	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	1	
C2013, 14	ECEA1HKN3R3	E. CAPACITOR 50V 3.3U	2		C3321	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2015	ECEA1HGR47	E. CAPACITOR 50V 0.47U	1		C3322	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C2016	ECQB1H472JH	P. CAPACITOR 50V 4700P	1		C3323	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2017	ECQV1H184J2	P. CAPACITOR 50V 0.18U	1		C3324	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
C2019	ECQV1H683J2	P. CAPACITOR 50V 0.068U	1		C3325	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2020	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C3326	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
C2021	ECEA1AK470	E. CAPACITOR 10V 47U	1		C3327, 28	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C2022	ECUM1H223KBN	C. CAPACITOR CH 50V 0.022U	1		C3329	ECEAOJK470	E. CAPACITOR 6.3V 47U	1	
C2023, 24	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2		C3330	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2025	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C3331	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C2026	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		C3332	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C2027	ECEA1CK100	E. CAPACITOR 16V 10U	1		C3333	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C2028	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		C3334	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2029	ECQB1H392JH	P. CAPACITOR 50V 3900P	1		C3335	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C2501	ECEA1CK101	E. CAPACITOR 16V 100U	1		C3336	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2502	ECAOJM221	E. CAPACITOR 6.3V 220U	1		C3337	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C2503, 04	ECQV1H333J2	P. CAPACITOR 50V 0.033U	2		C3338	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2505	ECEA1CU470	E. CAPACITOR 16V 47U	1		C3339	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2506-09	ECQV1H333J2	P. CAPACITOR 50V 0.033U	4		C3340	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2510-12	ECEA1HK2R2	E. CAPACITOR 50V 2.2U	3		C3341	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2513, 14	ECUM1C1052FN	C. CAPACITOR 16V 1U	2		C3342	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C2515	ECEAOJK470	E. CAPACITOR 6.3V 47U	1		C3343	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2516	ECEA1HK4R7	E. CAPACITOR 50V 4.7U	1		C3344	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C2517	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		C3345	ECUM1H391KBN	C. CAPACITOR CH 50V 390P	1	
C2518	ECEA1HKNR47	E. CAPACITOR 50V 0.47U	1		C3346	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2519	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		C3347	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C2520	ECEA1HKNR47	E. CAPACITOR 50V 0.47U	1		C3349	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2521	ECA1EM470	E. CAPACITOR 25V	1		C3350	ECUM1H681KBN	C. CAPACITOR CH 50V 680P	1	
C2522	ECUM1H1042FN	C. CAPACITOR 50V	1		C3351, 52	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	2	
C2524, 25	ECA1CM221	E. CAPACITOR 16V 220U	2		C3353	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C2526	ECEAOJK220	E. CAPACITOR 6.3V 22U	1		C3354	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C2527	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		C3355	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C2528	ECUM1H1042FN	C. CAPACITOR 50V	1		C3356	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C2529	ECUM1E2242FM	C. CAPACITOR CH 25V 0.22U	1		C3357	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2530	ECUM1E223KBN	C. CAPACITOR CH 25V 0.023U	1		C3358	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C2531	VCYE1C104MR1	S. CAPACITOR 16V 0.1U	1		C3359	ECEAOJK101	E. CAPACITOR 6.3V 100U	1	
C3001	ECEAOJK470	E. CAPACITOR 6.3V 47U	1		C3360	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3002	ECUM1H1042FN	C. CAPACITOR 50V	1		C3364	ECEAOJK470	E. CAPACITOR 6.3V 47U	1	
C3003-05	ECEA1CK100	E. CAPACITOR 16V 10U	3		C3365	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C3006-08	ECUM1H1042FN	C. CAPACITOR 50V	3		C3366	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3009	ECEA1HKN010	E. CAPACITOR 50V 1U	1		C3371	ECEAOJK220	E. CAPACITOR 6.3V 22U	1	
C3010	ECEA1CK100	E. CAPACITOR 16V 10U	1		C3372	ECEA1EK3R3	E. CAPACITOR 25V 3.3U	1	
C3011	ECEAOJK470	E. CAPACITOR 6.3V 47U	1		C3382	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3012, 13	ECUM1H1042FN	C. CAPACITOR 50V	2		C3501	ECEA1HKS010	E. CAPACITOR 50V 1U	1	
C3014, 15	ECEAOJK470	E. CAPACITOR 6.3V 47U	2		C3502	ECEA1CKS470	E. CAPACITOR 16V 47U	1	
C3016	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C3503	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3017, 18	ECEA1CK100	E. CAPACITOR 16V 10U	2		C3504	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C3019, 20	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		C3505	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3021, 22	ECEA1CK100	E. CAPACITOR 16V 10U	2		C3506	ECEA1CKS100	E. CAPACITOR 16V 10U	1	
C3023	ECEA1CK470	E. CAPACITOR 16V 47U	1		C3507	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3024	ECUM1H1042FN	C. CAPACITOR 50V	1		C3508	ECEA1HKS22	E. CAPACITOR 50V 0.22U	1	
C3025	ECEA1HK010	E. CAPACITOR 50V 1U	1		C3509	ECEA1EKS3R3	E. CAPACITOR 25V 3.3U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3510	ECEA1CKS100	E. CAPACITOR 16V 10U	1		C4541	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3511	ECEAOJNS470	E. CAPACITOR 6.3V 47U	1		C4545	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3512	ECUM1H1042FN	C. CAPACITOR 50V	1		C4552	ECUM1C1042FN	C. CAPACITOR CH 16V 0.1U	1	
C3514	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4556	VCEA1CAH100	E. CAPACITOR 16V 10U	1	
C3515	ECEA1CKS100	E. CAPACITOR 16V 10U	1		C4557	ECQB1H223JA	P. CAPACITOR 50V 0.022U	1	
C3516	ECEA1EKS3R3	E. CAPACITOR 25V 3.3U	1		C4558	ECEA1EB24R7	E. CAPACITOR 25V 4.7U	1	
C3517,18	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2		C4559	ECEA1AP2470	E. CAPACITOR 10V 47U	1	
C3519	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		C4560	ECQB1H103JA	P. CAPACITOR 50V 0.01U	1	
C3520,21	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		C4561	ECQB1H332JA	P. CAPACITOR 50V 3300P	1	
C3801	ECUM1H1042FN	C. CAPACITOR 50V	1		C4562	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1	
C3802	ECEAOJK101	E. CAPACITOR 6.3V 100U	1		C4563	ECUM1H681JN	C. CAPACITOR CH 50V 680P	1	
C3804	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1		C4564	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1	
C3805,06	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		C4565	VCEA1EAH4R7	E. CAPACITOR 25V 4.7U	1	
C3807	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1		C4567	ECEA1AP2101	E. CAPACITOR 10V 100U	1	
C3808,09	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		C4568	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3810	ECEA1HK3R3	E. CAPACITOR 50V 3.3U	1		C4572	VCEA1HAH3R3	E. CAPACITOR 50V 3.3U	1	
C3811,12	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		C4576	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
C3813	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1		C4583	ECEA1CP2330	E. CAPACITOR 16V 33U	1	
C3814	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1		C4585,86	ECEA1AP2101	E. CAPACITOR 10V 100U	2	
C3815	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4591	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3819	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4592	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C3901,02	ECEAOJK101	E. CAPACITOR 6.3V 100U	2		C4604	ECUM1H182JN	C. CAPACITOR CH 50V 1800P	1	
C3903	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4606	VCEAOJAC470	E. CAPACITOR 6.3V 47U	1	
C3904	ECEA1AK470	E. CAPACITOR 10V 47U	1		C4611	ECQB1H182JZ	P. CAPACITOR 50V 1800P	1	
C3905	ECEA1CK470	E. CAPACITOR 16V 47U	1		C4613	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1	
C3906	ECEA1CK100	E. CAPACITOR 16V 10U	1		C4616	ECUX1H1022FV	C. CAPACITOR CH 50V 100U	1	
C3907	ECEA1CKS100	E. CAPACITOR 16V 10U	1		C4617	ECEA10M22	E. CAPACITOR 10V 22U	1	
C3908,09	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	2		C4618	ECQB1H822JH	P. CAPACITOR 50V 8200P	1	
C3910	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4619	ECEA1APB100	E. CAPACITOR 10V 10U	1	
C3911,12	ECEAOJK101	E. CAPACITOR 6.3V 100U	2		C4621	ECEAOJPK101	E. CAPACITOR 6.3V 100U	1	
C3913	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		C4629	ECQB1H562JZ	P. CAPACITOR 50V 5600P	1	
C3914	ECUM1H1042FN	C. CAPACITOR 50V	1		C4636	ECUM1H471JN	C. CAPACITOR CH 50V 470P	1	
C3923-25	ECEAOJK101	E. CAPACITOR 6.3V 100U	3		C4638	ECQB1H822JH	P. CAPACITOR 50V 8200P	1	
C4001	ECEAOJK101	E. CAPACITOR 6.3V 100U	1		C4651	ECQB1H333JA	P. CAPACITOR 50V 0.033U	1	
C4002,03	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		C4652,53	ECUM1C1052FN	C. CAPACITOR 16V 1U	2	
C4005	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4901-04	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	4	
C4006	ECEAOJK470	E. CAPACITOR 6.3V 47U	1		C4906-10	VCEA1CAD100	E. CAPACITOR 16V 10U	3	
C4007	ECEA1M33	E. CAPACITOR 16V 33U	1		C4912	VCEAOJAC101	E. CAPACITOR 6.3V 100U	1	
C4008	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1		C4913	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4009	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		C4914	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4010	ECQP1222JZ	P. CAPACITOR 0.0022U	1		C4915	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4011	ECCD2H181J	C. CAPACITOR 500V 180P	1		C4916	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4013	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1		C4917	VCEA1CAD100	E. CAPACITOR 16V 10U	1	
C4014,15	ECEA1CK100	E. CAPACITOR 16V 10U	2		C4918	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4016	ECEA1HK2R2	E. CAPACITOR 50V 2.2U	1		C4919	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4017	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1		C4920	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4018	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		C4921	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4019	ECUM1H222JUN	C. CAPACITOR CH 50V 2200P	1		C4922	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4020,21	ECUM1H2242FM	C. CAPACITOR CH 50V 0.22U	2		C4923,24	ECQB1H332JH	P. CAPACITOR 50V 0.27U	2	
C4023	ECEA1CK100	E. CAPACITOR 16V 10U	1		C4925	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4024	ECUM1H1042FN	C. CAPACITOR 50V	1		C4926	VCEAOJAC101	E. CAPACITOR 6.3V 100U	1	
C4501	ECQB1H152JH	P. CAPACITOR 50V 1500P	1		C4927,28	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C4502	ECUM1C1042FN	C. CAPACITOR CH 16V 0.1U	1		C6001	ECEAOJK330	E. CAPACITOR 6.3V 33U	1	
C4503	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1		C6002	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C4504,05	ECEA1CP2470	E. CAPACITOR 16V 47U	2		C6003,04	ECEAOJK470	E. CAPACITOR 6.3V 47U	2	
C4506	VCEA1CAH100	E. CAPACITOR 16V 10U	1		C6005	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1	
C4507	ECQB1H223JA	P. CAPACITOR 50V 0.022U	1		C6006	ECQB1H392JH	P. CAPACITOR 50V 3900P	1	
C4508	ECEA1EB24R7	E. CAPACITOR 25V 4.7U	1		C6007	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4509	ECEA1AP2470	E. CAPACITOR 10V 47U	1		C6009,10	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	2	
C4510	ECQB1H103JA	P. CAPACITOR 50V 0.01U	1		C6014	ECAOJM331	E. CAPACITOR 6.3V 330U	1	
C4511	ECQB1H332JA	P. CAPACITOR 50V 3300P	1		C6015	ECEAOJK470	E. CAPACITOR 6.3V 47U	1	
C4512	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1		C6016	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C4513	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1		C6017	ECA1CM222	E. CAPACITOR 16V 2200U	1	
C4514	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1		C6018	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4515	VCEA1EAH4R7	E. CAPACITOR 25V 4.7U	1		C6019	ECEAOJK220	E. CAPACITOR 6.3V 22U	1	
C4517	ECEA1AP2101	E. CAPACITOR 10V 100U	1		C6020,21	ECUM1H1042FN	C. CAPACITOR 50V	2	
C4518	ECUM1H1042FN	C. CAPACITOR 50V	1		C6022,23	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	2	
C4521	ECUM1C473KBV	C. CAPACITOR CH 16V 0.047U	1		C6024	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4522	VCEA1HAH3R3	E. CAPACITOR 50V 3.3U	1		C6025	ECEA1HK2R2	E. CAPACITOR 50V 2.2U	1	
C4528	ECUM1H1042FN	C. CAPACITOR 50V	1		C6101	ECEAOJK470	E. CAPACITOR 6.3V 47U	1	
C4530	ECEAOJPK470	E. CAPACITOR 6.3V 47U	1		C6102	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4533	ECEA1CP2330	E. CAPACITOR 16V 33U	1		C6103	ECAOJM221	E. CAPACITOR 6.3V 220U	1	
C4537	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1		C6302	EBCS5R5V105	TRIMMER	1	
C4538	ECEA1HUR47	E. CAPACITOR 50V 0.47U	1		C7302	ECEA1CKN100	E. CAPACITOR 16V 10U	1	
C4539	ECUM1C2242FN	C. CAPACITOR CH 16V 0.22U	1		C7303	ECQV1H393JZ	P. CAPACITOR 50V 0.039U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7304	ECEA1CKN100	E. CAPACITOR 16V 10U	1	
C7305	ECQV1H473J2	P. CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102K2	P. CAPACITOR 50V 1000P	1	
C7307	ECQB1H822K2	P. CAPACITOR 50V 8200P	1	
C7308	ECQB1H102K2	P. CAPACITOR 50V 1000P	1	
C7309	ECQB1H152JH	P. CAPACITOR 50V 1500P	1	
C7310	ECEA16M10	E. CAPACITOR 16V	1	
C7311	ECEA50MR47	E. CAPACITOR	1	
C7312	ECQV1H224J2	P. CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104J2	P. CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224J2	P. CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104J2	P. CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224J2	P. CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E. CAPACITOR 16V 100U	1	
C7318	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C7319	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C7320, 21	ECEA1CK100	E. CAPACITOR 16V 10U	2	
C7323, 24	ECQV1H393J2	P. CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474J2	P. CAPACITOR 50V 0.47U	1	
C7332, 33	ECUM1H1022FN	C. CAPACITOR CH 50V 1000P	2	
C7334	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C7336	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C7337	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C7339	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C7340	ECUM1H390JFN	C. CAPACITOR CH 50V 39P	1	
C7341	ECUM1H070DCN	C. CAPACITOR CH 50V 7P	1	
C7342	ECQV1H823J2	P. CAPACITOR 50V 0.082U	1	
C7343	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7345	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C7346	ECUM1H390JFN	C. CAPACITOR CH 50V 39P	1	
C7347	ECUM1H070DCN	C. CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393J2	P. CAPACITOR 50V 0.039U	1	
C7349, 50	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	2	
C7351, 52	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C7401	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7402, 03	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C7404	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7405, 06	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C7407	ECUM1H1042FN	C. CAPACITOR 50V	1	
C7408	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7409	ECUM1H1042FN	C. CAPACITOR 50V	1	
C7651	ECEA1CKN100	E. CAPACITOR 16V 10U	1	
C7653	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C7666	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C7685	ECEA1HK010	E. CAPACITOR 50V 1U	1	
C7801	ECQV1H104J2	P. CAPACITOR 50V 0.1U	1	
C7815	VCYE1C104MR1	S. CAPACITOR 16V 0.1U	1	
C7816	ECEA1EK4R7	E. CAPACITOR 25V 4.7U	1	
C7821	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C7822	ECQB1H333JH	P. CAPACITOR 50V 0.033U	1	
C7823	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7851	ECQV1H104J2	P. CAPACITOR 50V 0.1U	1	
C7852	ECEA1CK101	E. CAPACITOR 16V 100U	1	
C7853, 54	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	
C7855, 56	ECEA1HK010	E. CAPACITOR 50V 1U	2	
C7860	ECEA0JK101	E. CAPACITOR 6.3V 100U	1	
		DIODES		
D301	MA723VT	DIODE	1 (VT)	
D302	MA4091M	DIODE	1	
D303	1SS254	DIODE	1	
D304	MA151K	DIODE	1	
D710	MA3100L	DIODE	1	
D801	1SS254	DIODE	1	
D802	MA151WK	DIODE	1	
D803	MA151WK	DIODE	1	
D805	1SS254	DIODE	1	
D806	MA723VT	DIODE	1 (VT)	
D807	1SS254	DIODE	1	
D808	MA151WA	DIODE	1	
D811-14	1SS254	DIODE	4	
D1005, 06	1SS254	DIODE	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D1701	S805-05CP	DIODE	1	
D1702	MA4300H	DIODE	1	
D1703	MA185	DIODE	1	
D2002	1SS254	DIODE	1	
D2501	1SS254	DIODE	1	
D2503-10	1SS254	DIODE	8	
D2511	AK04	DIODE	1	
D2512	MA723VT	DIODE	1 (VT)	
D2515	1SS254	DIODE	1	
D3001, 02	MA723VT	DIODE	2 (VT)	
D3004, 05	1SS254	DIODE	2	
D3006	MA723VT	DIODE	1 (VT)	
D3007	1SS254	DIODE	1	
D3009, 10	1SS254	DIODE	2	
D3011	MA723VT	DIODE	1 (VT)	
D3012	1SS254	DIODE	1	
D3301, 02	1SS254	DIODE	2	
D3304	MA723VT	DIODE	1 (VT)	
D3305	1SS254	DIODE	1	
D3901	MA4056M	DIODE	1	
D3902-04	1SS254	DIODE	3	
D4005	1SS254	DIODE	1	
D4501, 02	MA151K	DIODE	2	
D4503	MA151K	DIODE	1	
D4504	MA151K	DIODE	1	
D4601, 02	MA151K	DIODE	2	
D6001	MA723VT	DIODE	1 (VT)	
D6002	AK04	DIODE	1	
D6003, 04	MA723VT	DIODE	2 (VT)	
D6005, 06	1SS254	DIODE	2	
D6007	ERA15-01	DIODE	1	
D6008	AK04	DIODE	1	
D6009-15	1SS254	DIODE	7	
D6101, 02	MA156	DIODE	2	
D6105	AK04	DIODE	1	
D6106-09	1SS254	DIODE	4	
D7303	MA28WA	DIODE	1	
D7304	MA3100L	DIODE	1	
D7401	MA723VT	DIODE	1 (VT)	
D7403-06	1SS254	DIODE	4	
D7408	MA29W-A	DIODE	1	
D7672, 73	MA3150-H	DIODE	2	
D7851	1SS254	DIODE	1	
		DELAY LINES		
DL801	VLDO147	DELAY LINE	1	
DL802	EPDVR645A45A	DELAY LINE	1	
DL3801	EPDUN124A13N	DELAY	1	
		CONNECTORS		
FG	VJS1231R	CONNECTOR (FEMALE)	1	
		FILTERS		
FL301	VLFO639	FILTER	1	
FL302	ELB4MD22	FILTER	1	
FL303	VLFO727	FILTER	1	
FL801	ELB4W02	FILTER	1	
FL3001	VLFO413	FILTER	1	
FL3301	ELBAR031	FILTER	1	
FL3302	VLFO766	FILTER	1	
FL3303	VLFO765	FILTER	1	
FL3501, 02	VLFO523	FILTER	2	
FL3503, 04	VLFO526	FILTER	2	
FL3505	ELB4H054	FILTER	1	
FL4501	VLFO947	FILTER	1	
		INTEGRATED CIRCUITS		
IC301	VEFH20B	IC	1	
IC302	MSM6965-3RS	IC	1	
IC701	MS1366SP	IC	1	
IC801	VCRO284	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC802	NJM2233BMA	IC	1		L3301	VLQ0188J150	COIL	15UH	1
IC803	M52063SP	IC	1		L3303	VLQ0188J101	COIL	100UH	1
IC2001	AN3727S	IC	1		L3306	VLQ0188J390	COIL	39UH	1
IC2002	UPC350G2	IC	1		L3307	VLQ0188J120	COIL	12UH	1
IC2003	MN4066BS	IC	1		L3308	VLQ0188J330	COIL	33UH	1
IC2501	BA6435S	IC	1		L3309	VLQ0188J181	COIL	180UH	1
IC2502	UPC358G2	IC	1		L3310	VLQ0188J270	COIL	27UH	1
IC2503	SI-909OCLF	IC	1		L3311	VLQ0188J820	COIL	82UH	1
IC2504	TP1C0130N	IC	1		L3312	VLQ0188J151	COIL	150UH	1
IC3001,02	NJM2234MA	IC	2		L3313	ELESQ681KA	COIL	680UH	1
IC3003	M52055FP	IC	1		L3314	VLQ0188J101	COIL	100UH	1
IC3004	AN3581S	IC	1		L3315,16	VLQ0188J5R6	COIL	5.6UH	2
IC3301	M52083FP	IC	1		L3317	VLQ0188J120	COIL	12UH	1
IC3302	AN6300S	IC	1		L3316,19	ELESQ101KA	COIL	100UH	2
IC3504	CXLL1009P	IC	1		L3322,23	ELESQ101KA	COIL	100UH	2
IC3505	AN78109	IC	1		L3501-03	VLQ0188J101K	COIL	100UH	3
IC3801	AN3497SB	IC	1		L3510	VLQ0053	COIL		1
IC3901	M52474P	IC	1		L3801	ELESQ101KA	COIL	100UH	1
IC3902	BA7004	IC	1		L3802,03	VLQ0188J150	COIL	15UH	2
IC4001	RC4565DD	IC	1		L3804	VLQ0188J151	COIL	150UH	1
IC4501	BH7770KS	IC	1		L3805	VLQ0188J270	COIL	27UH	1
IC4601	BA7755AF	IC	1		L3901-03	ELESQ101KA	COIL	100UH	3
IC4901	LA7155M	IC	1		L4001	ELESQ471KA	COIL	470UH	1
IC4902	MN4066BS	IC	1		L4002,03	ELESQ101KA	COIL	100UH	2
IC6001	MN67431VRE0	IC	1		L4501,02	ELESQ101KA	COIL	100UH	2
IC6002	MC14519BF	IC	1		L4601	VLQ0188J153	COIL	15UH	1
IC6003	BU5863F	IC	1		L4901	ELESQ102KA	COIL	1000UH	1
IC6004	MN1280S	IC	1 (S)		L4902,03	ELESQ101KA	COIL	100UH	2
IC7301	TDA3803A	IC	1		L4904-06	ELESQ102KA	COIL	1000UH	3
IC7302	TA8721SN	IC	1		L4907-10	ELESQ101KA	COIL	100UH	4
IC7401	M66006FP	IC	1		L4911,12	ELESQ102KA	COIL	1000UH	2
IC7851	MN158413V88V	IC	1		L6001	VLQ0074	COIL		1
IC7852	MN1280S	IC	1 (S)		L7301	ELESQ102KA	COIL	1000UH	1
IC7853	SDA5642	IC	1		L7401-03	ELESQ101KA	COIL	100UH	3
		CONNECTORS				CONNECTORS			
J3951,52	VJS1470	CONNECTOR (FEMALE)	2		P001	VJS1738	CONNECTOR (FEMALE)	1	
					P501	VJS1238T	CONNECTOR (FEMALE)	1	
					P501	VJS1743	CONNECTOR (FEMALE)	1	
		COILS			P551	VJS1741	CONNECTOR (FEMALE)	1	
L303	ELESQ101KA	COIL	100UH	1	P1001	VJP2593	CONNECTOR (MALE)	1	
L304	VLQ0407101K	COIL	100UH	1	P1001	VJS2593	CONNECTOR (FEMALE)	1	
L305,06	ELESQ101KA	COIL	100UH	2	P1101	VJS1932T	CONNECTOR (FEMALE)	1	
L308	ELESQ180JA	COIL	18UH	1	P1103	VJS1142	CONNECTOR (FEMALE)	1	
L701	ELESQ680KA	COIL	68UH	1	P1502	VJS1141	CONNECTOR (FEMALE)	1	
L711	ELQTR22XB	COIL	0.22UH	1	P2002	VJPI232T	CONNECTOR (MALE)	5P	1
L714	VLQ0305J1R2	COIL	1.2UH	1	P2002	VJS1738	CONNECTOR (FEMALE)	1	
L715	VLQ0213K680	COIL	68UH	1	P2003	VJPI229T	CONNECTOR (MALE)	2P	1
L716	ELESQ560KA	COIL	56UH	1	P2501	VJS3193B015A	CONNECTOR (FEMALE)	1	
L717,18	ELESQ680KA	COIL	68UH	2	P2502	VJPI244T	CONNECTOR (MALE)	4P	1
L719	ELESQ120KA	COIL	12UH	1	P2502	VJS1231R	CONNECTOR (FEMALE)	1	
L781	ELESQ680KA	COIL	68UH	1	P3001	VJP3078	CONNECTOR (MALE)	1	
LB03,04	ELESQ101KA	COIL	100UH	2	P3001	VJS1743	CONNECTOR (FEMALE)	1	
LB05	VLQ0188J330	COIL	33UH	1	P3001	VJS3078	CONNECTOR (FEMALE)	1	
LB06,07	ELESQ681KA	COIL	680UH	2	P3003	VJPI235T	CONNECTOR (MALE)	8P	1
LB08	ELESQ331KA	COIL	330UH	1	P3003	VJS1235T	CONNECTOR (FEMALE)	1	
LB09	VLQ0188J470	COIL	47UH	1	P3004	VJP3081	CONNECTOR (MALE)	1	
LB10	VLQ0407101K	COIL	100UH	1	P3004	VJS3081	CONNECTOR (FEMALE)	1	
LB11-13	VLQ0188J150	COIL	15UH	3	P3005	VJPI231T	CONNECTOR (MALE)	4P	1
LB14	VLQ0188J330	COIL	33UH	1	P3005	VJS1737	CONNECTOR (FEMALE)	1	
LB15	ELESQ101KA	COIL	100UH	1	P3006	VJP3080	CONNECTOR (MALE)	1	
L2001	ELESQ101KA	COIL	100UH	1	P3006	VJS3080	CONNECTOR (FEMALE)	1	
L2002	VLQ0099	COIL		1	P3007	VJPI229T	CONNECTOR (MALE)	2P	1
L2003	VLQ0569	COIL		1	P3007	VJS1735	CONNECTOR (FEMALE)	1	
L2004	VLQ0552	COIL		1	P3301	VJPI229T	CONNECTOR (MALE)	2P	1
L2501	ELESQ102KA	COIL	1000UH	1	P3301	VJS1735	CONNECTOR (FEMALE)	1	
L2502,03	ELESQ101KA	COIL	100UH	2	P3506	VJS2776	CONNECTOR (FEMALE)	1	
L2505	VLQ0558K331	COIL	330UH	1	P3507	VJS2775	CONNECTOR (FEMALE)	1	
L2506	ELC07/B009	COIL		1	P3951	VJF0171T	CONNECTOR		1
L3001-03	ELESQ101KA	COIL	100UH	3	P3991	VJS1235T	CONNECTOR (FEMALE)	1	
L3005	ELESQ101KA	COIL	100UH	1	P4001	VJP3103	CONNECTOR (MALE)	1	
L3006	VLQ0398	COIL		1	P4002	VJPI235T	CONNECTOR (MALE)	8P	1
L3007	ELESQ101KA	COIL	100UH	1	P4002	VJS1741	CONNECTOR (FEMALE)	1	
L3008-11	VLQ0556	COIL		4	P4003	VJPI229T	CONNECTOR (MALE)	2P	1



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P4003	VJS1229T	CONNECTOR (FEMALE)	1	
P4004	VJP3079	CONNECTOR (MALE)	1	
P4004	VJS3079	CONNECTOR (FEMALE)	1	
P6001	VJS3193A015A	CONNECTOR (FEMALE)	1	
P6004	VJS2571A004	CONNECTOR (FEMALE)	1	
P6501	VJS1744	CONNECTOR (FEMALE)	1	
P6502	VJS3079	CONNECTOR (FEMALE)	1	
P7403	VJS1744	CONNECTOR (FEMALE)	1	
P7501	VJS3193A016A	CONNECTOR (FEMALE)	1	
P7502	VJS1455	CONNECTOR (FEMALE)	1	
P7503	VJP3079	CONNECTOR (MALE)	1	
P9001	VJS3080	CONNECTOR (FEMALE)	1	
P9002	VJS1737	CONNECTOR (FEMALE)	1	
		CONNECTORS		
PK3021-24	VJR0190	PACK PIN	4	
PP2501	VJP3043G010W	CONNECTOR (MALE)	1	
PP2502	VJP3043G008W	CONNECTOR (MALE)	1	
PP2503	VJP3043G012W	CONNECTOR (MALE)	1	
PP3001	VJP3044G009W	CONNECTOR (MALE)	1	
PP3002_03	VJP3044G012W	CONNECTOR (MALE)	2	
PP3011_12	VJP3042A018W	CONNECTOR (MALE)	2	
PP3301	VJP2776	CONNECTOR (MALE)	1	
PP3302	VJP2775	CONNECTOR (MALE)	1	
PP4001-03	VJP3186A018	CONNECTOR (MALE)	3	
PP7401-03	VJP3043A005W	CONNECTOR (MALE)	3	
PP7404	VJP3043A006W	CONNECTOR (MALE)	1	
PP7705	VJP3043A004W	CONNECTOR (MALE)	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE)	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE)	1	
PS2501	VJS3043B010W	CONNECTOR (FEMALE)	1	
PS2502	VJS3043F008W	CONNECTOR (FEMALE)	1	
PS2503	VJS3043F012W	CONNECTOR (FEMALE)	1	
PS3001	VJS3044F009W	CONNECTOR (FEMALE)	1	
PS3002_03	VJS3044F012W	CONNECTOR (FEMALE)	2	
PS3011_12	VJS3042F018W	CONNECTOR (FEMALE)	2	
PS4001-03	VJS3186B018	CONNECTOR (FEMALE)	3	
PS7301_02	VJR0477	PACK PIN	2	
		TRANSISTORS		
Q301-03	MSC2295	TRANSISTOR	3	
Q703	MSD601-S	TRANSISTOR	1	
Q712	2SD1992	TRANSISTOR	1	
Q771	MSD601-S	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q802	MSD601	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q1001	2SD1996	TRANSISTOR	1	
Q1701	2SD1994-S	TRANSISTOR	1	
Q2001	2SD1915F	TRANSISTOR	1	
Q2002	MSB709	TRANSISTOR	1	
Q2003	MSD601	TRANSISTOR	1	
Q2501	2SB772	TRANSISTOR	1	
Q3001_02	MSD601	TRANSISTOR	2	
Q3003	2SD1328	TRANSISTOR CHIP	1	
Q3004_05	MSC2295	TRANSISTOR	2	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSD601	TRANSISTOR	1	
Q3301_02	MSC2295	TRANSISTOR	2	
Q3304_05	MSD601	TRANSISTOR	2	
Q3306	MSB709	TRANSISTOR	1	
Q3307_08	MSC2295	TRANSISTOR	2	
Q3309	MSD601	TRANSISTOR	1	
Q3310	MSB709	TRANSISTOR	1	
Q3315_16	MSC2295	TRANSISTOR	2	
Q3317	MSD601	TRANSISTOR	1	
Q3319	MSB709	TRANSISTOR	1	
Q3320	MSD601	TRANSISTOR	1	
Q3506	2SC2295	TRANSISTOR	1	
Q3507	2SB709	TRANSISTOR CHIP	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3508	2SC2295	TRANSISTOR	1	
Q3801	MSD601	TRANSISTOR	1	
Q3804	MSC2295	TRANSISTOR	1	
Q3805	MSB709	TRANSISTOR	1	
Q3901	MSD601	TRANSISTOR	1	
Q3902	2SB1320	TRANSISTOR	1	
Q3903	MSD601	TRANSISTOR	1	
Q3904	MSB709	TRANSISTOR	1	
Q3908	2SD1328	TRANSISTOR CHIP	1	
Q3909	MSD601	TRANSISTOR	1	
Q3910	MSB709	TRANSISTOR	1	
Q4002	2SB790	TRANSISTOR	1	
Q4003	MSB709	TRANSISTOR	1	
Q4004	2SB790	TRANSISTOR	1	
Q4005	2SB1321	TRANSISTOR	1	
Q4006	2SD1992A-R	TRANSISTOR	1	(R)
Q4007_08	MSD601	TRANSISTOR	2	
Q4011_12	MSD601	TRANSISTOR	2	
Q4015_16	2SD1328	TRANSISTOR CHIP	2	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4601_02	MSD1328	TRANSISTOR	2	
Q6001	2SD1991	TRANSISTOR	1	
Q6003	2SD893	TRANSISTOR	1	
Q6004_05	2SD1994-S	TRANSISTOR	2	(S)
Q6006	MSD602	TRANSISTOR	1	
Q6007_08	MSD601	TRANSISTOR	2	
Q6101	MSD601	TRANSISTOR	1	
Q6102	MSB709	TRANSISTOR	1	
Q7301	MSD601-S	TRANSISTOR	1	
Q7304_05	MSD601	TRANSISTOR	2	
Q7306	2SC2404-C	TRANSISTOR CHIP	1	(C,D)
Q7307	2SD1328	TRANSISTOR	1	
Q7401	2SB1320	TRANSISTOR	1	
		COMBINATION PARTS		
QR301	MRN2402	TRANSISTOR	1	
QR302	MRN1404	TRANSISTOR	1	
QR304_05	MRN1404	TRANSISTOR	2	
QR306	MRN1402	TRANSISTOR	1	
QR308	MRN1402	TRANSISTOR	1	
QR309	MRN2404	TRANSISTOR	1	
QR310	MRN1404	TRANSISTOR	1	
QR312	MRN1404	TRANSISTOR	1	
QR701_02	MRN1404	TRANSISTOR	2	
QR711_12	MRN1403	TRANSISTOR	2	
QR801	MRN1404	TRANSISTOR	1	
QR802	MRN1407	TRANSISTOR	1	
QR803_04	MRN1402	TRANSISTOR	2	
QR805_06	MRN1404	TRANSISTOR	2	
QR807	MRN1402	TRANSISTOR	1	
QR808	MRN1403	TRANSISTOR	1	
QR809	MRN1404	TRANSISTOR	1	
QR810	MRN2404	TRANSISTOR	1	
QR1001_02	MRN1402	TRANSISTOR	2	
QR2001_02	MRN1403	TRANSISTOR	2	
QR2502	MRN1403	TRANSISTOR	1	
QR2503	MRN1404	TRANSISTOR	1	
QR2504	MRN2404	TRANSISTOR	1	
QR3001	MRN2403	TRANSISTOR-RESISTOR	1	
QR3002-06	MRN1404	TRANSISTOR	5	
QR3008	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3009	MRN2402	TRANSISTOR	1	
QR3010	MRN1402	TRANSISTOR	1	
QR3011	MRN1407	TRANSISTOR	1	
QR3012	MRN2402	TRANSISTOR	1	
QR3013	MRN1402	TRANSISTOR	1	
QR3014	MRN1404	TRANSISTOR	1	
QR3301-04	DTC363EK	COMBI. TR-R	4	
QR3305	MRN2403	TRANSISTOR-RESISTOR	1	
QR3306	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3901	MRN1403	TRANSISTOR	1	
QR3902	MRN1402	TRANSISTOR	1	
QR4001	MRN1404	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR4002	MRN1402	TRANSISTOR	1	
QR4003	MRN1403	TRANSISTOR	1	
QR4004_05	MRN1402	TRANSISTOR	2	
QR4006	MRN1404	TRANSISTOR	1	
QR4007	MRN1403	TRANSISTOR	1	
QR4009_10	MRN1403	TRANSISTOR	2	
QR4012-14	MRN1404	TRANSISTOR	3	
QR4016	MRN1402	TRANSISTOR	1	
QR4017	MRN1404	TRANSISTOR	1	
QR4508_09	MRN2404	TRANSISTOR	2	
QR4510	MRN1403	TRANSISTOR	1	
QR4602	MRN2402	TRANSISTOR	1	
QR4603	MRN1404	TRANSISTOR	1	
QR4901	MRN1404	TRANSISTOR	1	
QR4902	UN211D	TRANSISTOR-RESISTOR	1	
QR6001_02	MRN2402	TRANSISTOR	2	
QR6003	MRN1402	TRANSISTOR	1	
QR6004	UN211H	IC	1	
QR6005	MRN2404	TRANSISTOR	1	
QR6006	UN211H	IC	1	
QR6007	MRN2404	TRANSISTOR	1	
QR6008	MRN2402	TRANSISTOR	1	
QR6009_10	MRN1404	TRANSISTOR	2	
QR6011_12	MRN1402	TRANSISTOR	2	
QR6014	MRN2404	TRANSISTOR	1	
QR6101	MRN1404	TRANSISTOR	1	
QR6102_03	MRN1402	TRANSISTOR	2	
QR6104	MRN1404	TRANSISTOR	1	
QR7301_02	MRN1404	TRANSISTOR	2	
QR7312-14	MRN1402	TRANSISTOR	3	
QR7315_16	MRN1404	TRANSISTOR	2	
QR7401	MRN1404	TRANSISTOR	1	
QR7402	DTC124TK	TRANSISTOR-RESISTOR	1	
QR7801	MRN2402	TRANSISTOR	1	
QR7802	MRN1404	TRANSISTOR	1	
QR7851	MRN1402	TRANSISTOR	1	
QR7852	MRN1404	TRANSISTOR	1	
		RESISTORS		
R301_02	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R308	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R309	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R310	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R311	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R320_21	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R322	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R323	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R324	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R325	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R326	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R327	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R328	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R329	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R330	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R331	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R332	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R333	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R334	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R335	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R336	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R337	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R338	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R340	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R341	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R342	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R343	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R344	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R345	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R716	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R717	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718	ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719_20	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R721	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R722	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R723	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R737	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R740	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R741	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R743	ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R759	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R781	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R782	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R792	ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R802	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R803	ERJ6GMYJ183	M.RESISTOR CH 1/10W 1.8K	1	
R804	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R805_06	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R807	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R809	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R810	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R811	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R812	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R813	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R814	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R815	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R816	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R817	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R818	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R819	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R820	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R821	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R822	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R824	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R825	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R826	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R831	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R832_33	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R835	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R836-38	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R839_40	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R841	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R842	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R843	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R844	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R845	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R846	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R847	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R848	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R849_50	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R851	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R852	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R853	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R854	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R1002	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R1003	ERJ6GMYJ20R00	M.RESISTOR CH 1/10W 0	1	
R1004	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1701	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1703	ERJ6GMYJ20R00	M.RESISTOR CH 1/10W 0	1	
R2001_02	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2003	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2005_06	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2007	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2008_09	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2010	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2011	ERDS2TJ391	C.RESISTOR 1/4w 390	1	
R2012	ERJ6GMJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2013	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2014	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R2015	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R2016	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2017	ERJ6GMJ123	M.RESISTOR CH 1/10W 12K	1	
R2018	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R2019	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2020	ERJ6GMJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2021	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2022, 23	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	2	
R2024	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R2025	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2501	ERDS2TJ330	C.RESISTOR 1/4w 33	1	
R2502	ERJ6GMJ752	M.RESISTOR CH 1/10W 7.5K	1	
R2503	ERJ6GMJ622	M.RESISTOR CH 1/10W 6.2K	1	
R2504	ERJ6GMJ512	M.RESISTOR CH 1/10W 5.1K	1	
R2505	ERJ6GMJ513	M.RESISTOR CH 1/10W 51K	1	
R2507	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R2508-10	ERDS2TJ560	C.RESISTOR 1/4w 56	3	
R2511, 12	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2513	ERJ6GMJ105	M.RESISTOR CH 1/10W 1M	1	
R2514	ERJ6GMJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2515	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R2516	ERJ6GMJ105	M.RESISTOR CH 1/10W 1M	1	
R2517	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	1	
R2520	ERDS2TJ681	C.RESISTOR 1/4w 680	1	
R2521	ERDS1TJ681	C.RESISTOR 1/2w 680	1	
R2522	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R2523	ERJ6GMJ123	M.RESISTOR CH 1/10W 12K	1	
R2524	ERJ6GMJ393	M.RESISTOR CH 1/10W 39K	1	
R2525	ERJ6GMJ124	M.RESISTOR CH 1/10W 120K	1	
R2526	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	1	
R2528	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R2529	ERJ6GMJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2530	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2531	ERJ6GMJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2532	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R2534	ERSF30JR90	M.RESISTOR 0.9	1	
R2535	ERJ6GMJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2537	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R2538	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	1	
R2539	ERJ6GMJ622	M.RESISTOR CH 1/10W 6.2K	1	
R2540	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R2541	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2542	ERX12SLR47	M.RESISTOR 1/2w 0.47	1	
R2543	ERJ6GMJ824	M.RESISTOR CH 1/10W 820K	1	
R2544	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3001, 02	ERJ6GMJ750	M.RESISTOR CH 1/10W 75	2	
R3003, 04	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	2	
R3005, 06	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3007	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3008	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3009	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3010	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R3011	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3012	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3013	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3014	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3015	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3016	ERJ6GMJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3018, 19	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3020	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3021	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3022, 23	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	2	
R3024	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R3025	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3027	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3028	ERJ6GMJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3029	ERJ6GMJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3030	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3031	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3032	ERJ6GMJ202	M.RESISTOR CH 1/10W 2K	1	
R3033	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3034, 35	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3037	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3039-42	ERJ6GMJ750	M.RESISTOR CH 1/10W 75	4	
R3044	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R3045	ERJ6GMJ391	M.RESISTOR CH 1/10W 390	1	
R3301	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R3302	ERJ6GMJ183	M.RESISTOR CH 1/10W 18K	1	
R3303	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3304	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3305	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3306	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3308	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3310	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3311-13	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	3	
R3320, 21	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	2	
R3322	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R3323	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R3324	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3325, 26	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	2	
R3327	ERJ6GMJ821	M.RESISTOR CH 1/10W 820	1	
R3328	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3329	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R3330	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3331	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3332	ERJ6GMJ681	M.RESISTOR CH 1/10W 680	1	
R3333	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3334	ERJ6GMJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3335	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3336, 37	ERJ6GMJ681	M.RESISTOR CH 1/10W 680	2	
R3338	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3339	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R3340	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R3341	ERJ6GMJ563	M.RESISTOR CH 1/10W 56K	1	
R3342	ERJ6GMJ391	M.RESISTOR CH 1/10W 390	1	
R3343	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3344-47	ERJ6GMJ821	M.RESISTOR CH 1/10W 820	4	
R3348	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3349	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3350	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3351	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3352	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R3353, 54	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	2	
R3355	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3356	ERJ6GMJ102	M.RESISTOR CH 1/10W 1.1K	1	
R3366	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3367	ERJ6GMJ563	M.RESISTOR CH 1/10W 56K	1	
R3368	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R3369	ERJ6GMJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3370	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3371	ERJ6GMJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3375, 76	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3377	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3378	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3379	ERJ6GMJ821	M.RESISTOR CH 1/10W 820	1	
R3380	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3387	ERJ6GMJ202	M.RESISTOR CH 1/10W 2K	1	
R3388	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3390	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3392	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R3393	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3501	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3502	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R3503	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3504	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3505	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3506	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3507	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3508, 09	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R3510	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3517	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3535	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3802	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3803	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3804	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3806	ERJ6GMJ681	M.RESISTOR CH 1/10W 680	1	
R3807	ERJ6GMJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3809	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3810	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3811	ERJ6GMJ271	M.RESISTOR CH 1/10W 270	1	
R3812	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R3813	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3814	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R3822	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R3823	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R3824, 25	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3826	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3901-04	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	4	
R3905	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3906	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3907	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908, 09	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3910	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3916	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3917	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3918	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3919	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3920	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3921	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3922	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3923, 24	ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R3926, 27	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R3928	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3938, 39	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3940	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3941-44	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R3945, 46	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3947, 48	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3949	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3950	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3951-53	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	3	
R4001	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R4003, 04	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4005	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4006, 07	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R4008	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4009	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4010	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4012	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4013	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4014	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4015	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R4018	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	1	
R4022	ERJ6GMJ100	M.RESISTOR CH 1/10W 10	1	
R4025	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4026	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R4033	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R4034	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R4035	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R4036	ERJ6GMJ821	M.RESISTOR CH 1/10W 820	1	
R4037	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4038, 39	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R4040	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4041, 42	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	2	
R4044	ERJ6GMJ433	M.RESISTOR CH 1/10W 43K	1	
R4045	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R4047	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4048-51	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	4	
R4052	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4053	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4054	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	1	
R4055	ERJ6GMJ123	M.RESISTOR CH 1/10W 12K	1	
R4101	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4102	ERJ6GMJG272	M.RESISTOR CH 1/10W 2.7K	1	
R4103	ERJ6GMJG682	M.RESISTOR CH 1/10W 6.8K	1	
R4104	ERJ6GMJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4501, 02	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4503	VRE007E136C	M.RESISTOR	1	
R4504, 05	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506, 07	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R4509	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510	ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	1	
R4512	VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4514, 15	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R4518, 19	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	2	
R4522	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527	VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528	VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R4541	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551, 52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R4561	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	1	
R4562	VRE0034E10C	M.RESISTOR 1/10W	1	
R4563	ERJ3GEYJG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578	VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R4586	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587, 88	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4593	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R4606	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R4612	ERJ6GMJ331	M.RESISTOR CH 1/10W 330	1	
R4613	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615	ERJ6GEYJ133	M.RESISTOR CH 1/10W 13K	1	
R4616	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R4649	ERJ3GEYJ470	M.RESISTOR 1/16W 47	1	
R4651	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4652	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4653	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R4654	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4655	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656	ERJ6GEYJ243	M.RESISTOR CH 1/10W 24K	1	
R4657	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4901	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4902	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4903	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4904	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4905	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4906	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4907	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4908	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4909, 10	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R4911	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4912	ERJ6GEYJ163	M.RESISTOR CH 1/10W 16K	1	
R4913, 14	ERJ6GEYJ433	M.RESISTOR CH 1/10W 43K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4915	ERJ6GEY163	M.RESISTOR CH 1/10W 16K	1	
R4916	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4917-20	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	4	
R4921	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	1	
R4922,23	ERJ6GEYJ243	M.RESISTOR CH 1/10W 24K	2	
R4924	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	1	
R4925,26	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4927,28	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R6001	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6002	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6003	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6004	ERJ6GMJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6005	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6006,07	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	2	
R6008-10	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	3	
R6011	ERJ6GMJ104	M.RESISTOR CH 1/10W 100K	1	
R6012	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6013	ERD82TJ103	C.RESISTOR 1/4W 10K	1	
R6014-20	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	7	
R6021	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6022	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6023	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6027	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R6028	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R6029	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R6030	ERJ6GMJ271	M.RESISTOR CH 1/10W 270	1	
R6031	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R6032	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6033	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R6034	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6035	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6036	ERJ6GEY201	M.RESISTOR CH 1/10W 200	1	
R6037	FRG2S1150	M.RESISTOR 2W 15	1	
R6038	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6039	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6040	ERD2FCG220	C.RESISTOR 2W 22	1	
R6041	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R6043,44	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6045	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R6046	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6047	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6048,49	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R6050,51	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	2	
R6052	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R6053	ERJ6GMJ184	M.RESISTOR CH 1/10W 180K	1	
R6054	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R6055	ERJ6GMJ181	M.RESISTOR CH 1/10W 180	1	
R6057	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6058	ERJ6GEY131	M.RESISTOR CH 1/10W 130	1	
R6059	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6060,61	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R6062	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6063	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6064	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6101	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6102,03	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R6104,05	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	2	
R6106,09	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	2	
R6110	ERJ6GMJ183	M.RESISTOR CH 1/10W 18K	1	
R6111	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6305	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R7302	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7303	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7304	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7305	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7306	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7307	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7308	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7309	ERD82TJ102	C.RESISTOR 1/4W 1K	1	
R7310	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R7311	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7312	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R7313	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7314,15	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2	
R7316	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7317	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7318	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R7321	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7322	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7323	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7324,25	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R7329	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7330	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7334-37	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	4	
R7336	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7339	ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R7340	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7341	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7342	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7345	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7346	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7347	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7348	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7349	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7351-53	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7354,55	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R7401	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7402	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7403	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R7405-13	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	9	
R7416,17	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7419	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R7420,21	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	2	
R7422-24	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	3	
R7656	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7676	ERL1S152	M.RESISTOR 1W 1.5K	1	
R7801	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7802	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7803,04	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7805	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7806	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7807	ERJ6GEYJ512	M.RESISTOR CH 1/10W 5.1K	1	
R7808	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7821	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7822	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R7851	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7860	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
		SWITCHES		
SW3901	VSS0157	SWITCH	1	
		TRANSFORMERS		
T703	E1V5ECC013A	TRANSFORMER	1	
T704	E1V5ECC006A1	TRANSFORMER	1	
T1701	VLT0683	TRANSFORMER	1	
T4001	E1Q7QF013Q	TRANSFORMER	1	
T7301	E1R7Q0001B	IF TRANSFORMER	1	
T7302,03	E1L7QH012Q	TRANSFORMER	2	
T7304	E1S5ECC007A	TRANSFORMER	1	
T7305	E1S5ECC005A	TRANSFORMER	1	
		VARIABLE RESISTORS		
VR301	EVN32CA00B23	V.RESISTOR 2K	1	
VR302,03	EVN32CA00B13	V.RESISTOR 1K	2	
VR304	EVNF6SA00B23	V.RESISTOR 2K	1	
VR701,02	EVTF6SA00B23	V.RESISTOR 2K	2	
VR741	EVNDXAA00B14	V.RESISTOR 10K	1	
VR801	EVND1AA00B14	V.RESISTOR 10K	1	
VR802	EVNF6SA00B14	V.RESISTOR 10K	1	
VR2001	EVNDXAA00B54	V.RESISTOR 50K	1	
VR2006	EVNDXAA00B15	V.RESISTOR 100K	1	
VR2011	EVNDXAA00B15	V.RESISTOR 100K	1	
VR2018,19	EVNDXAA00B15	V.RESISTOR 100K	2	
VR3001-03	EVNDXAA00B23	V.RESISTOR 2K	3	
VR3004	EVMEASA01B54	V.RESISTOR	1	
VR3301	EVNF6SA00B24	V.RESISTOR 20K	1	
VR3302	EVN32CA00B54	V.RESISTOR 50K	1	



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C828	ECEA1HK3R3	E. CAPACITOR 50V 3.3U	1	
C829-31	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	3	
C832, 33	ECUM1H1042FN	C. CAPACITOR 50V	2	
C834	ECFA0JK101	E. CAPACITOR 6.3V 100U	1	
C835	ECUM1H390JCN	C. CAPACITOR CH 50V 39P	1	
C836	ECEA0JK101	E. CAPACITOR 6.3V 100U	1	
C837	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C838, 39	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C840	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C841	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C842	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C843	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C844	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	1	
C845	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C846	ECUM1C1052FN	C. CAPACITOR 16V 1U	1	
C847	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C848	ECUM1H821KBN	C. CAPACITOR CH 50V 820P	1	
C849	ECUM1H1042FN	C. CAPACITOR 50V	1	
C850, 51	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C852	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C1003	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C1004	ECEA1CK101	E. CAPACITOR 16V 100U	1	
C1009	ECEA1AK330	E. CAPACITOR 10V 33U	1	
C1010	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C1701	ECQD2H471KB	E. CAPACITOR 500V 470P	1	
C1702	ECA1CM101	E. CAPACITOR 16V 100U	1	
C1703	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C1704	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C1705	ECUM1H1042FN	C. CAPACITOR 50V	1	
C1706	ECA1VM100	E. CAPACITOR 35V 10U	1	
C1707	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C1708	ECA1CM221	E. CAPACITOR 16V 220U	1	
C2001	ECEA1HK4R7	E. CAPACITOR 50V 4.7U	1	
C2002	ECEA0JK220	E. CAPACITOR 6.3V 22U	1	
C2003	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	1	
C2004	ECEA1HK3R3	E. CAPACITOR 50V 3.3U	1	
C2005	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C2006	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C2007	ECEA0JK470	E. CAPACITOR 6.3V 47U	1	
C2008	ECEA0JK101	E. CAPACITOR 6.3V 100U	1	
C2009	VCYE1C104MR1	S. CAPACITOR 16V 0.1U	1	
C2010	ECEA0JK221	E. CAPACITOR 6.3V 220U	1	
C2011, 12	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	2	
C2013, 14	ECEA1HKN3R3	E. CAPACITOR 50V 3.3U	2	
C2015	ECEA1HBR47	E. CAPACITOR 50V 0.47U	1	
C2016	ECQB1H472JH	P. CAPACITOR 50V 4700P	1	
C2017	ECQV1H164JZ	P. CAPACITOR 50V 0.18U	1	
C2019	ECQV1H683JZ	P. CAPACITOR 50V 0.068U	1	
C2020	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2021	ECEA1AK470	E. CAPACITOR 10V 47U	1	
C2022	ECUM1H222KBN	C. CAPACITOR CH 50V 0.022U	1	
C2023, 24	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C2025	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C2026	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C2027	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C2028	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C2029	ECQB1H392JH	P. CAPACITOR 50V 3900P	1	
C2501	ECEA1CK101	E. CAPACITOR 16V 100U	1	
C2502	ECQJH221	E. CAPACITOR 6.3V 220U	1	
C2503, 04	ECQV1H333JZ	P. CAPACITOR 50V 0.033U	2	
C2505	ECEA1CU470	E. CAPACITOR 16V 47U	1	
C2506-09	ECQV1H333JZ	P. CAPACITOR 50V 0.033U	4	
C2510-12	ECEA1HK2R2	E. CAPACITOR 50V 2.2U	3	
C2513, 14	ECUM1C1052FN	C. CAPACITOR 16V 1U	2	
C2515	ECEA0JK470	E. CAPACITOR 6.3V 47U	1	
C2516	ECEA1HK4R7	E. CAPACITOR 50V 4.7U	1	
C2517	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2518	ECEA1HBR47	E. CAPACITOR 50V 0.47U	1	
C2519	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2520	ECEA1HKN47	E. CAPACITOR 50V 0.47U	1	
C2521	ECA1EM470	E. CAPACITOR 25V	1	
C2522	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2524, 25	ECA1CM221	E. CAPACITOR 16V 220U	2	
C2526	ECEA0JK220	E. CAPACITOR 6.3V 22U	1	
C2527	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2528	ECUM1H1042FN	C. CAPACITOR 50V	1	
C2529	ECUM1E2242FM	C. CAPACITOR CH 25V 0.22U	1	
C2530	ECUM1E223KEN	C. CAPACITOR CH 25V 0.023U	1	
C2531	VCYE1C104MR1	S. CAPACITOR 16V 0.1U	1	
C3001	ECEA0JK470	E. CAPACITOR 6.3V 47U	1	
C3002	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3003, 04	ECEA1CK100	E. CAPACITOR 16V 10U	2	
C3006, 07	ECUM1H1042FN	C. CAPACITOR 50V	2	
C3009	ECEA1HK010	E. CAPACITOR 50V 1U	1	
C3010	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C3011	ECEA0JK470	E. CAPACITOR 6.3V 47U	1	
C3012, 13	ECUM1H1042FN	C. CAPACITOR 50V	2	
C3014, 15	ECEA0JK470	E. CAPACITOR 6.3V 47U	2	
C3016	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3017, 18	ECEA1CK100	E. CAPACITOR 16V 10U	2	
C3019, 20	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C3021, 22	ECEA1CK100	E. CAPACITOR 16V 10U	2	
C3023	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C3024	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3025	ECEA1HK010	E. CAPACITOR 50V 1U	1	
C3026	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3027, 28	ECEA1HK010	E. CAPACITOR 50V 1U	2	
C3029	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3033	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C3034	ECA0JM331	E. CAPACITOR 6.3V 330U	1	
C3035	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C3036	ECA0JM331	E. CAPACITOR 6.3V 330U	1	
C3037	ECEA1HK010	E. CAPACITOR 50V 1U	1	
C3038	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3039	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3040	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C3041	ECEA1AKN470	E. CAPACITOR 10V 47U	1	
C3042	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C3043	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3044	ECUM1H561KBN	C. CAPACITOR CH 50V 560P	1	
C3301	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C3302	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C3304-08	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	5	
C3309	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3310	ECEA0JK470	E. CAPACITOR 6.3V 47U	1	
C3313, 14	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C3315	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C3316	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	1	
C3321	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3322	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3323	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3324	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
C3325	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3326	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
C3327, 28	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C3329	ECEA0JK470	E. CAPACITOR 6.3V 47U	1	
C3330	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3331	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3332	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C3333	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C3334	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3335	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C3336	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3337	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C3338	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3339	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3340	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C3341	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3342	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3343	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3344	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3345	ECUM1H391KBN	C. CAPACITOR CH 50V 390P	1	
C3346	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3347	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C3349	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3350	ECUM1H681KBN	C. CAPACITOR CH 50V 680P	1	
C3351, 52	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	2	
C3353	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3354	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3355	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3356	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3357	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3358	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C3364	ECEAJK470	E. CAPACITOR 6.3V 47U	1	
C3365	ECEAJK470	E. CAPACITOR 16V 47U	1	
C3366	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3371	ECEAJK220	E. CAPACITOR 6.3V 22U	1	
C3372	ECEAJK3R3	E. CAPACITOR 25V 3.3U	1	
C3382	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3801	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3802	ECEAJK101	E. CAPACITOR 6.3V 100U	1	
C3804	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3805_06	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C3807	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3808_09	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C3810	ECEAJK3R3	E. CAPACITOR 50V 3.3U	1	
C3811_12	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C3813	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C3814	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C3815	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3819	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3901_02	ECEAJK101	E. CAPACITOR 6.3V 100U	2	
C3903	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3904	ECEAJK470	E. CAPACITOR 10V 47U	1	
C3905	ECEAJK470	E. CAPACITOR 16V 47U	1	
C3906	ECEAJK100	E. CAPACITOR 16V 10U	1	
C3907	ECEAJK100	E. CAPACITOR 16V 10U	1	
C3908_09	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	2	
C3910	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3911_12	ECEAJK101	E. CAPACITOR 6.3V 100U	2	
C3913	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3914	ECUM1H1042FN	C. CAPACITOR 50V	1	
C3923-25	ECEAJK101	E. CAPACITOR 6.3V 100U	3	
C4001	ECEAJK101	E. CAPACITOR 6.3V 100U	1	
C4002_03	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2	
C4005	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C4006	ECEAJK470	E. CAPACITOR 6.3V 47U	1	
C4007	ECEAJK33	E. CAPACITOR 16V 33U	1	
C4008	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4009	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4010	ECQP1222J2	P. CAPACITOR 0.0022U	1	
C4011	ECDD2H181J	C. CAPACITOR 500V 180P	1	
C4013	ECQV1H104J2	P. CAPACITOR 50V 0.1U	1	
C4014_15	ECEAJK100	E. CAPACITOR 16V 10U	2	
C4016	ECEAJK2R2	E. CAPACITOR 50V 2.2U	1	
C4017	ECUM1H471KBN	C. CAPACITOR CH 50V 470P	1	
C4018	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C4019	ECUM1H222JUN	C. CAPACITOR CH 50V 2200P	1	
C4020_21	ECUM1H2242FM	C. CAPACITOR CH 50V 0.22U	2	
C4023	ECEAJK100	E. CAPACITOR 16V 10U	1	
C4024	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4501	ECQB1H152JH	P. CAPACITOR 50V 1500P	1	
C4502	ECUM1C1042FN	C. CAPACITOR CH 16V 0.1U	1	
C4503	ECUX1H152KBU	C. CAPACITOR CH 50V 1500P	1	
C4504_05	ECEAJK470	E. CAPACITOR 16V 47U	2	
C4506	VCEAJCAH100	E. CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P. CAPACITOR 50V 0.022U	1	
C4508	ECEAJEB24R7	E. CAPACITOR 25V 4.7U	1	
C4509	ECEAJAF2470	E. CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P. CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P. CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JV	C. CAPACITOR CH 50V 560P	1	
C4513	ECUM1H681JN	C. CAPACITOR CH 50V 680P	1	
C4514	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1	
C4515	VCEAJFAH4R7	E. CAPACITOR 25V 4.7U	1	
C4517	ECEAJAF2101	E. CAPACITOR 10V 100U	1	
C4518	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4521	ECUM1C473KBU	C. CAPACITOR CH 16V 0.047U	1	
C4522	VCEAJHAH3R3	E. CAPACITOR 50V 3.3U	1	
C4528	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4530	ECEAJPK470	E. CAPACITOR 6.3V 47U	1	
C4533	ECEAJCP2330	E. CAPACITOR 16V 33U	1	
C4537	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4538	ECEAJHUR47	E. CAPACITOR 50V 0.47U	1	
C4539	ECUM1C2242FN	C. CAPACITOR CH 16V 0.22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4541	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4545	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C4552	ECUM1C1042FN	C. CAPACITOR CH 16V 0.1U	1	
C4556	VCEAJCAH100	E. CAPACITOR 16V 10U	1	
C4557	ECQB1H223JA	P. CAPACITOR 50V 0.022U	1	
C4558	ECEAJEB24R7	E. CAPACITOR 25V 4.7U	1	
C4559	ECEAJAF2470	E. CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P. CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P. CAPACITOR 50V 3300P	1	
C4562	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1	
C4563	ECUM1H681JN	C. CAPACITOR CH 50V 680P	1	
C4564	ECUM1H561JN	C. CAPACITOR CH 50V 560P	1	
C4565	VCEAJFAH4R7	E. CAPACITOR 25V 4.7U	1	
C4567	ECEAJAF2101	E. CAPACITOR 10V 100U	1	
C4568	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4572	VCEAJHAH3R3	E. CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
C4583	ECEAJCP2330	E. CAPACITOR 16V 33U	1	
C4585_86	ECEAJAF2101	E. CAPACITOR 10V 100U	2	
C4591	ECUM1H1042FN	C. CAPACITOR 50V	1	
C4592	ECUX1H152KBU	C. CAPACITOR CH 50V 1500P	1	
C4604	ECUM1H182JN	C. CAPACITOR CH 50V 1800P	1	
C4606	VCEAJAC470	E. CAPACITOR 6.3V 47U	1	
C4611	ECQB1H182J2	P. CAPACITOR 50V 1800P	1	
C4613	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1	
C4616	ECUX1H1022FV	C. CAPACITOR CH 50V 1000P	1	
C4617	ECEAJM22	E. CAPACITOR 10V 22U	1	
C4618	ECQB1H822JH	P. CAPACITOR 50V 8200P	1	
C4619	ECEAJAFB100	E. CAPACITOR 10V 10U	1	
C4621	ECEAJPK101	E. CAPACITOR 6.3V 100U	1	
C4629	ECQB1H562J2	P. CAPACITOR 50V 5600P	1	
C4636	ECUM1H471JN	C. CAPACITOR CH 50V 470P	1	
C4638	ECQB1H822JH	P. CAPACITOR 50V 8200P	1	
C4651	ECQB1H333JA	P. CAPACITOR 50V 0.033U	1	
C4652_53	ECUM1C1052FN	C. CAPACITOR 16V 1U	2	
C4901-04	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	4	
C4908-10	VCEAJCAD100	E. CAPACITOR 16V 10U	3	
C4912	VCEAJAC101	E. CAPACITOR 6.3V 100U	1	
C4913	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4914	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4915	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4916	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4917	VCEAJCAD100	E. CAPACITOR 16V 10U	1	
C4918	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4919	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4920	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4921	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1	
C4922	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4923_24	ECQB1H332JH	P. CAPACITOR 50V 0.27U	2	
C4925	ECQB1H103JH	P. CAPACITOR 50V 0.01U	1	
C4926	VCEAJAC101	E. CAPACITOR 6.3V 100U	1	
C4927_28	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C6001	ECEAJK330	E. CAPACITOR 6.3V 33U	1	
C6002	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C6003_04	ECEAJK470	E. CAPACITOR 6.3V 47U	2	
C6005	ECQV1H104J2	P. CAPACITOR 50V 0.1U	1	
C6006	ECQB1H392JH	P. CAPACITOR 50V 3900P	1	
C6007	ECUM1H1042FN	C. CAPACITOR 50V	1	
C6009_10	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	2	
C6014	ECQAJM331	E. CAPACITOR 6.3V 330U	1	
C6015	ECEAJK470	E. CAPACITOR 6.3V 47U	1	
C6016	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C6017	ECA1CM222	E. CAPACITOR 16V 2200U	1	
C6018	ECUM1H1042FN	C. CAPACITOR 50V	1	
C6019	ECEAJK220	E. CAPACITOR 6.3V 22U	1	
C6020_21	ECUM1H1042FN	C. CAPACITOR 50V	2	
C6022_23	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	2	
C6024	ECUM1H1042FN	C. CAPACITOR 50V	1	
C6025	ECEAJK2R2	E. CAPACITOR 50V 2.2U	1	
C6101	ECEAJK470	E. CAPACITOR 6.3V 47U	1	
C6102	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C6103	ECQAJM221	E. CAPACITOR 6.3V 220U	1	
C6302	EECS5R5V105	TRIMMER	1	
C7302	ECEAJCKN100	E. CAPACITOR 16V 10U	1	
C7303	ECQV1H393J2	P. CAPACITOR 50V 0.039U	1	



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7304	ECEA1CKN100	E. CAPACITOR 16V 10U	1		D1701	5B05-05CP	DIODE	1	
C7305	ECQV1H473JZ	P. CAPACITOR 50V 0.047U	1		D1702	MA4300H	DIODE	1	
C7306	ECQB1H102KZ	P. CAPACITOR 50V 1000P	1		D1703	MA185	DIODE	1	
C7307	ECQB1H822KZ	P. CAPACITOR 50V 8200P	1		D2002	1SS254	DIODE	1	
C7308	ECQB1H102KZ	P. CAPACITOR 50V 1000P	1		D2501	1SS254	DIODE	1	
C7309	ECQB1H152JH	P. CAPACITOR 50V 1500P	1		D2503-10	1SS254	DIODE	8	
C7310	ECEA16M10	E. CAPACITOR 16V	1		D2511	AK04	DIODE	1	
C7311	ECEA50MR47	E. CAPACITOR	1		D2512	MA723VT	DIODE	1	(VT)
C7312	ECQV1H224JZ	P. CAPACITOR 50V 0.22U	1		D2515	1SS254	DIODE	1	
C7313	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1		D3004	1SS254	DIODE	1	
C7314	ECQV1H224JZ	P. CAPACITOR 50V 0.22U	1		D3006	MA723VT	DIODE	1	(VT)
C7315	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1		D3007	1SS254	DIODE	1	
C7316	ECQV1H224JZ	P. CAPACITOR 50V 0.22U	1		D3010	1SS254	DIODE	1	
C7317	ECEA1CK101	E. CAPACITOR 16V 100U	1		D3011	MA723VT	DIODE	1	(VT)
C7318	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		D3012	1SS254	DIODE	1	
C7319	ECEA1CK470	E. CAPACITOR 16V 47U	1		D3301.02	1SS254	DIODE	2	
C7320, 21	ECEA1CK100	E. CAPACITOR 16V 10U	2		D3304	MA723VT	DIODE	1	(VT)
C7323, 24	ECQV1H393JZ	P. CAPACITOR 50V 0.039U	2		D3305	1SS254	DIODE	1	
C7331	ECQV1H474JZ	P. CAPACITOR 50V 0.47U	1		D3901	MA4056M	DIODE	1	
C7332, 33	ECUM1H1022FN	C. CAPACITOR CH 50V 1000P	2		D3902-04	1SS254	DIODE	3	
C7334	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		D4005	1SS254	DIODE	1	
C7335	ECEA1CK470	E. CAPACITOR 16V 47U	1		D4501.02	MA151K	DIODE	2	
C7336	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		D4503	MA151K	DIODE	1	
C7337	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1		D4504	MA151K	DIODE	1	
C7339	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		D4601.02	MA151K	DIODE	2	
C7340	ECUM1H390JFN	C. CAPACITOR CH 50V 39P	1		D6001	MA723VT	DIODE	1	(VT)
C7341	ECUM1H070DCN	C. CAPACITOR CH 50V 7P	1		D6002	AK04	DIODE	1	
C7342	ECQV1H823JZ	P. CAPACITOR 50V 0.082U	1		D6003.04	MA723VT	DIODE	2	(VT)
C7343	ECEA1CK100	E. CAPACITOR 16V 10U	1		D6005.06	1SS254	DIODE	2	
C7345	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		D6007	ERA15-01	DIODE	1	
C7346	ECUM1H390JFN	C. CAPACITOR CH 50V 39P	1		D6008	AK04	DIODE	1	
C7347	ECUM1H070DCN	C. CAPACITOR CH 50V 7P	1		D6009-15	1SS254	DIODE	7	
C7348	ECQV1H393JZ	P. CAPACITOR 50V 0.039U	1		D6101.02	MA156	DIODE	2	
C7349, 50	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	2		D6105	AK04	DIODE	1	
C7351, 52	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		D6106-09	1SS254	DIODE	4	
C7353	ECEA1CK470	E. CAPACITOR 16V 47U	1		D7303	MA28WA	DIODE	1	
C7401	ECEA1CK100	E. CAPACITOR 16V 10U	1		D7304	MA3100L	DIODE	1	
C7402, 03	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		D7401	MA723VT	DIODE	1	(VT)
C7404	ECEA1CK100	E. CAPACITOR 16V 10U	1		D7403-06	1SS254	DIODE	4	
C7405, 06	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	2		D7408	MA29W-A	DIODE	1	
C7407	ECUM1H1042FN	C. CAPACITOR 50V	1		D7672.73	MA3150-H	DIODE	2	
C7408	ECEA1CK100	E. CAPACITOR 16V 10U	1		D7851	1SS254	DIODE	1	
C7409	ECUM1H1042FN	C. CAPACITOR 50V	1						
C7651	ECEA1CKN100	E. CAPACITOR 16V 10U	1						
C7653	ECQB1H332JH	P. CAPACITOR 50V 0.27U	1				DELAY LINES		
C7668	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1		DL801	VLD0147	DELAY LINE	1	
C7685	ECEA1HK010	E. CAPACITOR 50V 1U	1		DL802	EFDVH645A45A	DELAY LINE	1	
C7801	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1		DL3801	EFDUN124A13N	DELAY	1	
C7815	VCYE1C104MR1	S. CAPACITOR 16V 0.1U	1						
C7816	ECEA1EK4R7	E. CAPACITOR 25V 4.7U	1						
C7821	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1				CONNECTORS		
C7822	ECQB1H333JH	P. CAPACITOR 50V 0.033U	1		FC	VJ31231R	CONNECTOR (FEMALE)	1	
C7823	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1						
C7851	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1						
C7852	ECEA1CK101	E. CAPACITOR 16V 100U	1				FILTERS		
C7853, 54	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2		FL301	VLF0639	FILTER	1	
C7855, 56	ECEA1HK010	E. CAPACITOR 50V 1U	2		FL302	ELB4M022	FILTER	1	
C7860	ECEA0JK101	E. CAPACITOR 6.3V 100U	1		FL303	VLF0727	FILTER	1	
					FL801	ELB4M002	FILTER	1	
					FL3001	VLF0413	FILTER	1	
		DIODES			FL3301	ELB4R031	FILTER	1	
D301	MA723VT	DIODE	1	(VT)	FL3302	VLF0766	FILTER	1	
D302	MA4091M	DIODE	1		FL3303	VLF0765	FILTER	1	
D303	1SS254	DIODE	1		FL4501	VLF0947	FILTER	1	
D304	MA151K	DIODE	1						
D710	MA3100L	DIODE	1						
D801	1SS254	DIODE	1				INTEGRATED CIRCUITS		
D802	MA151K	DIODE	1		IC301	VEFH20B	IC	1	
D803	MA151K	DIODE	1		IC302	MSM6965-3RS	IC	1	
D805	1SS254	DIODE	1		IC701	M513668P	IC	1	
D806	MA723VT	DIODE	1	(VT)	IC801	VCRO284	IC	1	
D807	1SS254	DIODE	1		IC802	NJM2233BMA	IC	1	
D808	MA151WA	DIODE	1		IC803	M52063SP	IC	1	
D811-14	1SS254	DIODE	4		IC2001	AN3727S	IC	1	
D1005, 06	1SS254	DIODE	2		IC2002	UPC358G2	IC	1	



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
PP2503	VJP3043G012W	CONNECTOR (MALE)	1	
PP3001	VJP3044G009W	CONNECTOR (MALE)	1	
PP3002,03	VJP3044G012W	CONNECTOR (MALE)	2	
PP3011,12	VJP3042A018W	CONNECTOR (MALE)	2	
PP4001-03	VJP3186A018	CONNECTOR (MALE)	3	
PP7401-03	VJP3043A005W	CONNECTOR (MALE)	3	
PP7404	VJP3043A006W	CONNECTOR (MALE)	1	
PP7705	VJP3043A004W	CONNECTOR (MALE)	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE)	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE)	1	
PS2501	VJS3043B010W	CONNECTOR (FEMALE)	1	
PS2502	VJS3043F008W	CONNECTOR (FEMALE)	1	
PS2503	VJS3043F012W	CONNECTOR (FEMALE)	1	
PS3001	VJS3044F009W	CONNECTOR (FEMALE)	1	
PS3002,03	VJS3044F012W	CONNECTOR (FEMALE)	2	
PS3011,12	VJS3042F018W	CONNECTOR (FEMALE)	2	
PS4001-03	VJS3186B018	CONNECTOR (FEMALE)	3	
PS7301,02	VJRO477	PACK PIN	2	
		TRANSISTORS		
Q301-03	MSC2295	TRANSISTOR	3	
Q703	MSD601-S	TRANSISTOR	1	
Q712	2SD1992	TRANSISTOR	1	
Q771	MSD601-S	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q802	MSD601	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q1001	2SD1996	TRANSISTOR	1	
Q1701	2SD1994-S	TRANSISTOR	1	
Q2001	2SD1915F	TRANSISTOR	1	
Q2002	MSB709	TRANSISTOR	1	
Q2003	MSD601	TRANSISTOR	1	
Q2501	2SB772	TRANSISTOR	1	
Q3001,02	MSD601	TRANSISTOR	2	
Q3003	2SD1328	TRANSISTOR CHIP	1	
Q3004,05	MSC2295	TRANSISTOR	2	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSD601	TRANSISTOR	1	
Q3301,02	MSC2295	TRANSISTOR	2	
Q3304,05	MSD601	TRANSISTOR	2	
Q3306	MSB709	TRANSISTOR	1	
Q3307,08	MSC2295	TRANSISTOR	2	
Q3309	MSD601	TRANSISTOR	1	
Q3315,16	MSC2295	TRANSISTOR	2	
Q3317	MSD601	TRANSISTOR	1	
Q3801	MSD601	TRANSISTOR	1	
Q3804	MSC2295	TRANSISTOR	1	
Q3805	MSB709	TRANSISTOR	1	
Q3901	MSD601	TRANSISTOR	1	
Q3902	2SB1320	TRANSISTOR	1	
Q3903	MSD601	TRANSISTOR	1	
Q3904	MSB709	TRANSISTOR	1	
Q3908	2SD1328	TRANSISTOR CHIP	1	
Q3909	MSD601	TRANSISTOR	1	
Q3910	MSB709	TRANSISTOR	1	
Q4002	2SB790	TRANSISTOR	1	
Q4003	MSB709	TRANSISTOR	1	
Q4004	2SB790	TRANSISTOR	1	
Q4005	2SB1321	TRANSISTOR	1	
Q4006	2SD1992A-R	TRANSISTOR	1 (R)	
Q4007,08	MSD601	TRANSISTOR	2	
Q4011,12	MSD601	TRANSISTOR	2	
Q4015,16	2SD1328	TRANSISTOR CHIP	2	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4601,02	MSD1328	TRANSISTOR	2	
Q6001	2SD1991	TRANSISTOR	1	
Q6003	2SD893	TRANSISTOR	1	
Q6004,05	2SD1994-S	TRANSISTOR	2 (S)	
Q6006	MSD602	TRANSISTOR	1	
Q6007,08	MSD601	TRANSISTOR	2	
Q6101	MSD601	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q6102	MSB709	TRANSISTOR	1	
Q7301	MSD601-S	TRANSISTOR	1	
Q7304,05	MSD601	TRANSISTOR	2	
Q7306	2SC2404-C	TRANSISTOR CHIP	1 (C,D)	
Q7307	2SD1328	TRANSISTOR	1	
Q7401	2SB1320	TRANSISTOR	1	
		COMBINATION PARTS		
QR301	MRN2402	TRANSISTOR	1	
QR302	MRN1404	TRANSISTOR	1	
QR304,05	MRN1404	TRANSISTOR	2	
QR306	MRN1402	TRANSISTOR	1	
QR308	MRN1402	TRANSISTOR	1	
QR309	MRN2404	TRANSISTOR	1	
QR310	MRN1404	TRANSISTOR	1	
QR312	MRN1404	TRANSISTOR	1	
QR701,02	MRN1404	TRANSISTOR	2	
QR711,12	MRN1403	TRANSISTOR	2	
QR801	MRN1404	TRANSISTOR	1	
QR802	MRN1407	TRANSISTOR	1	
QR803,04	MRN1402	TRANSISTOR	2	
QR805,06	MRN1404	TRANSISTOR	2	
QR807	MRN1402	TRANSISTOR	1	
QR808	MRN1403	TRANSISTOR	1	
QR809	MRN1404	TRANSISTOR	1	
QR810	MRN2404	TRANSISTOR	1	
QR1001,02	MRN1402	TRANSISTOR	2	
QR2001,02	MRN1403	TRANSISTOR	2	
QR2502	MRN1403	TRANSISTOR	1	
QR2503	MRN1404	TRANSISTOR	1	
QR2504	MRN2404	TRANSISTOR	1	
QR3001	MRN2403	TRANSISTOR-RESISTOR	1	
QR3002-C6	MRN1404	TRANSISTOR	5	
QR3008	DTC363EX	TRANSISTOR-RESISTOR	1	
QR3009	MRN2402	TRANSISTOR	1	
QR3010	MRN1402	TRANSISTOR	1	
QR3011	MRN1407	TRANSISTOR	1	
QR3012	MRN2402	TRANSISTOR	1	
QR3013	MRN1402	TRANSISTOR	1	
QR3014	MRN1404	TRANSISTOR	1	
QR3301-04	DTC363EX	COMBI. TR-R	4	
QR3305	MRN2403	TRANSISTOR-RESISTOR	1	
QR3306	DTC363EX	TRANSISTOR-RESISTOR	1	
QR3901	MRN1403	TRANSISTOR	1	
QR3902	MRN1402	TRANSISTOR	1	
QR4001	MRN1404	TRANSISTOR	1	
QR4002	MRN1402	TRANSISTOR	1	
QR4003	MRN1403	TRANSISTOR	1	
QR4004,05	MRN1402	TRANSISTOR	2	
QR4006	MRN1404	TRANSISTOR	1	
QR4007	MRN1403	TRANSISTOR	1	
QR4009,10	MRN1403	TRANSISTOR	2	
QR4012-14	MRN1404	TRANSISTOR	3	
QR4016	MRN1402	TRANSISTOR	1	
QR4017	MRN1404	TRANSISTOR	1	
QR4508,09	MRN2404	TRANSISTOR	2	
QR4510	MRN1403	TRANSISTOR	1	
QR4602	MRN2402	TRANSISTOR	1	
QR4603	MRN1404	TRANSISTOR	1	
QR6001,02	MRN2402	TRANSISTOR	2	
QR6003	MRN1402	TRANSISTOR	1	
QR6004	UN211H	IC	1	
QR6005	MRN2404	TRANSISTOR	1	
QR6006	UN211H	IC	1	
QR6007	MRN2404	TRANSISTOR	1	
QR6008	MRN2402	TRANSISTOR	1	
QR6009,10	MRN1404	TRANSISTOR	2	
QR6012	MRN1402	TRANSISTOR	1	
QR6014	MRN2404	TRANSISTOR	1	
QR6101	MRN1404	TRANSISTOR	1	
QR6102,03	MRN1402	TRANSISTOR	2	
QR6104	MRN1404	TRANSISTOR	1	
QR7301,02	MRN1404	TRANSISTOR	2	
QR7312-14	MRN1402	TRANSISTOR	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR7315,16	MRN1404	TRANSISTOR	2	
QR7401	MRN1404	TRANSISTOR	1	
QR7402	DTCI24TK	TRANSISTOR-RESISTOR	1	
QR7801	MRN2402	TRANSISTOR	1	
QR7802	MRN1404	TRANSISTOR	1	
QR7851	MRN1402	TRANSISTOR	1	
QR7852	MRN1404	TRANSISTOR	1	
		RESISTORS		
R301,02	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R308	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R309	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R310	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R311	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R320,21	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R322	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R323	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R324	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R325	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R326	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R327	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R328	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R329	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R330	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R331	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R332	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R333	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R334	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R335	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R336	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R337	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R338	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R340	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R341	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R342	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R343	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R344	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R345	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R716	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R717	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718	ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719,20	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R721	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R722	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R723	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R737	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R740	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R741	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R743	ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R759	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R781	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R782	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R792	ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R802	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R803	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R804	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R805,06	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R807	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R809	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R810	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R811	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R812	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R813	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R814	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R815	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R816	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R817	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R818	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R819	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R820	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R821	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R822	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R824	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R825	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R826	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R831	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R832,33	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R835	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R836-38	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R839,40	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R841	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R842	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R843	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R844	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R845	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R846	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R847	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R848	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R849,50	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R851	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R852	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R853	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R854	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R1002	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R1003	ERJ6GMYZ0R00	M.RESISTOR CH 1/10W 0	1	
R1004	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1701	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1703	ERJ6GMYZ0R00	M.RESISTOR CH 1/10W 0	1	
R2001,02	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2003	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2005,06	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2007	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2008,09	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	
R2010	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2011	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2012	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2013	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2014	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2015	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2016	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2017	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R2018	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2019	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2020	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2021	ERJ6GMYZ0R00	M.RESISTOR CH 1/10W 0	1	
R2022,23	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R2024	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2025	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2501	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2502	ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R2503	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R2504	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2505	ERJ6GMYG513	M.RESISTOR CH 1/10W 51K	1	
R2507	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2508-10	ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2511,12	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2513	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2514	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2515	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2516	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2517	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2520	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2521	ERDS1TJ681	C.RESISTOR 1/2W 680	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2522	ERJ6GMYC473	M.RESISTOR CH 1/10W 47K	1	
R2523	ERJ6GMYC123	M.RESISTOR CH 1/10W 12K	1	
R2524	ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R2525	ERJ6GMYG124	M.RESISTOR CH 1/10W 120K	1	
R2526	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2528	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2529	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2530	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2531	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2532	ERJ6GMYC473	M.RESISTOR CH 1/10W 47K	1	
R2534	ERSF30JR90	M.RESISTOR	0.9	
R2535	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2537	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2538	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2539	ERJ6GMYJ622	M.RESISTOR CH 1/10W 6.2K	1	
R2540	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2541	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2542	ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2543	ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R2544	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3001.02	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3003.04	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3006	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3007	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3009	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3010	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3011	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3012	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3013	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3014	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3015	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3016	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3017	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3018.19	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3020	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3021	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3022.23	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3024	ERJ6GMYC471	M.RESISTOR CH 1/10W 470	1	
R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3027	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3028	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3029	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3030	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3031	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3032	ERJ6GMYG202	M.RESISTOR CH 1/10W 2K	1	
R3033	ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3034.35	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3039-42	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	4	
R3301	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3302	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3303	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3304	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3305	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3306	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3308	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3310	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3311-13	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R3320.21	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3322	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3323	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3324	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3325.26	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3327	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3328	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3329	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3330	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3331	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3332	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3333	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3334	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3335	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3336.37	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R3338	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3339	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3340	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3341	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3343	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3344-47	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	4	
R3348	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3349	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3350	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3351	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3352	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3353.54	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3355	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3356	ERJ6GMYC112	M.RESISTOR CH 1/10W 1.1K	1	
R3367	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3368	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3369	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3370	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3371	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3375.76	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3377	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3378	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3379	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3380	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3392	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3395	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3396	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R3802	ERJ6GMYC000	M.RESISTOR CH 1/10W 0	1	
R3803	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3804	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3806	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3807	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3809	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3810	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3811	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R3812	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3813	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3814	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3822	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3823	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3824.25	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3826	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3901-04	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	4	
R3905	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3906	ERJ6GEYC223	M.RESISTOR CH 1/10W 22K	1	
R3907	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908.09	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3910	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3916	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3917	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3918	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3919	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3920	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3921	ERJ6GEYC223	M.RESISTOR CH 1/10W 22K	1	
R3922	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3923.24	ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R3926.27	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R3928	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3938.39	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3940	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3941-44	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R3945.46	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3947.48	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3949	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3950	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3951-53	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	3	
R4001	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4003.04	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4005	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4006.07	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4008	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4009	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4010	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4012	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4013	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4014	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4015	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R4018	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	1	
R4022	ERJ6GMJ100	M.RESISTOR CH 1/10W 10	1	
R4025	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4026	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R4033	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R4034	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R4035	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R4036	ERJ6GMJ821	M.RESISTOR CH 1/10W 820	1	
R4037	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4038, 39	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R4040	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4041, 42	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	2	
R4044	ERJ6GMJ433	M.RESISTOR CH 1/10W 43K	1	
R4045	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R4047	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4048-51	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	4	
R4052	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4053	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4054	ERJ6GMJ153	M.RESISTOR CH 1/10W 15K	1	
R4055	ERJ6GMJ123	M.RESISTOR CH 1/10W 12K	1	
R4101	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4102	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4103	ERJ6GMJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4104	ERJ6GMJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4b01, 02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503	VRE0071E36C	M.RESISTOR	1	
R4504, 05	ERJ3GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506, 07	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508	ERJ6GEY224	M.RESISTOR CH 1/10W 220K	1	
R4509	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510	ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511	ERJ6GEY303	M.RESISTOR CH 1/10W 30K	1	
R4512	VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4514, 15	ERJ6GEY223	M.RESISTOR CH 1/10W 22K	2	
R4518, 19	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R4522	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527	VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528	VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529	ERJ6GEY0562	M.RESISTOR CH 1/10W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551, 52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558	ERJ6GEY224	M.RESISTOR CH 1/10W 220K	1	
R4561	ERJ6GEY303	M.RESISTOR CH 1/10W 30K	1	
R4562	VRE0034E10C	M.RESISTOR 1/10W	1	
R4563	ERJ3GEY272	M.RESISTOR CH 1/16W 2.7K	1	
R4568	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578	VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587, 88	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592	ERJ6GEY0563	M.RESISTOR CH 1/10W 56K	1	
R4593	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4603	ERJ3GEY183	M.RESISTOR CH 1/16W 18K	1	
R4606	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R4612	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4613	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615	ERJ6GEYJ133	M.RESISTOR CH 1/10W 13K	1	
R4616	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4649	ERJ3GEY470	M.RESISTOR 1/16W 47	1	
R4651	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4652	ERJ6GEY223	M.RESISTOR CH 1/10W 22K	1	
R4653	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R4654	ERJ6GEY223	M.RESISTOR CH 1/10W 22K	1	
R4655	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656	ERJ6GEY243	M.RESISTOR CH 1/10W 24K	1	
R4657	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4901	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4902	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4903	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4904	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4905	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4906	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4907	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4908	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4909, 10	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R4911	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4912	ERJ6GEY163	M.RESISTOR CH 1/10W 16K	1	
R4913, 14	ERJ6GEY433	M.RESISTOR CH 1/10W 43K	2	
R4915	ERJ6GEY163	M.RESISTOR CH 1/10W 16K	1	
R4916	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4917-20	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	4	
R4921	ERJ6GEY303	M.RESISTOR CH 1/10W 30K	1	
R4922, 23	ERJ6GEY243	M.RESISTOR CH 1/10W 24K	2	
R4924	ERJ6GEY303	M.RESISTOR CH 1/10W 30K	1	
R4925, 26	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R6001	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6002	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6003	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6004	ERJ6GMJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6005	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6006, 07	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	2	
R6008-10	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	3	
R6011	ERJ6GMJ104	M.RESISTOR CH 1/10W 100K	1	
R6012	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6013	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6014-20	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	7	
R6021	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6022	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6023	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6027	ERJ6GMJ473	M.RESISTOR CH 1/10W 47K	1	
R6028	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R6029	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R6030	ERJ6GMJ271	M.RESISTOR CH 1/10W 270	1	
R6031	ERJ6GMJ561	M.RESISTOR CH 1/10W 560	1	
R6032	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6033	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R6034	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6035	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6036	ERJ6GEY201	M.RESISTOR CH 1/10W 200	1	
R6037	ERG2SJ150	M.RESISTOR 2W 15	1	
R6038	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6039	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6040	ERD2FCG220	C.RESISTOR 2W 22	1 <1>	
R6041	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R6043, 44	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6045	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R6046	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6047	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6048, 49	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R6050, 51	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	2	
R6052	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R6053	ERJ6GMJ184	M.RESISTOR CH 1/10W 180K	1	
R6054	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6055	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1						
R6057	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1						
R6058	ERJ6GEYJ131	M.RESISTOR CH 1/10W 130	1				TRANSFORMERS		
R6059	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1		T703	E1V5EC013A	TRANSFORMER	1	
R6060,61	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2		T704	E1V5EC006A1	TRANSFORMER	1	
R6062	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1		T1701	VLTO683	TRANSFORMER	1	
R6063	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1		T4001	E1Q7QF013Q	TRANSFORMER	1	
R6064	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1		T7301	E1R7QG001B	IF TRANSFORMER	1	
R6101	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1		T7302,03	E1L/QH012Q	TRANSFORMER	2	
R6102,03	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2		T7304	E1S5EC007A	TRANSFORMER	1	
R6104,05	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2		T7305	E1S5EC005A	TRANSFORMER	1	
R6108,09	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2						
R6110	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1						
R6111	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1				VARIABLE RESISTORS		
R6305	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1		VR301	EUN32CA00B23	V.RESISTOR	2K	1
R7302	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1		VR302,03	EUN32CA00B13	V.RESISTOR	1K	2
R7303	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1		VR304	EVMF6SA00B23	V.RESISTOR	2K	1
R7304	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1		VR701,02	EVTF6SA00B23	V.RESISTOR	2K	2
R7305	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1		VR741	EVNDXAA00B14	V.RESISTOR	10K	1
R7306	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1		VR801	EVND1AA00B14	V.RESISTOR	10K	1
R7307	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1		VR802	EVMF6SA00B14	V.RESISTOR	10K	1
R7308	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1		VR2001	EVNDXAA00B54	V.RESISTOR	50K	1
R7309	ERDS2TJ102	C.RESISTOR 1/4W 1K	1		VR2006	EVNDXAA00B15	V.RESISTOR	100K	1
R7310	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1		VR2011	EVNDXAA00B15	V.RESISTOR	100K	1
R7311	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1		VR2018,19	EVNDXAA00B15	V.RESISTOR	100K	2
R7312	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1		VR3001-03	EVNDXAA00B23	V.RESISTOR	2K	3
R7313	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1		VR3004	EVMEASA01B54	V.RESISTOR		1
R7314,15	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2		VR3301	EVMF6SA00B24	V.RESISTOR	20K	1
R7316	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1		VR3302	EUN32CA00B54	V.RESISTOR	50K	1
R7317	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1		VR3304,05	EUN32CA00B52	V.RESISTOR	500	2
R7318	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1		VR3801	EVMF6SA00B13	V.RESISTOR		1
R7321	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1		VR3802	EVMF6SA00B23	V.RESISTOR	2K	1
R7322	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1		VR4001	EVNDXAA00B25	V.RESISTOR	200K	1
R7323	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1		VR4501	EVMFLSA00B53	V.RESISTOR		1
R7324,25	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2		VR4502	EVMF6SA00B24	V.RESISTOR	20K	1
R7329	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1		VR4507	EVMF6SA00B24	V.RESISTOR	20K	1
R7330	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1		VR4509	EVMFLSA00B53	V.RESISTOR		1
R7334-37	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	4		VR4512	EVNDXAA00B52	V.RESISTOR	500	1
R7338	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1		VR4550	EVMFLSA00B53	V.RESISTOR		1
R7339	ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1		VR4551,52	EVMF6SA00B55	V.RESISTOR		2
R7340	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1		VR7301	EVMF6SA00B14	V.RESISTOR	10K	1
R7341	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1		VR7326	EVMF6SA00B52	V.RESISTOR		1
R7342	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1		VR7328	EVMF6SA00B52	V.RESISTOR		1
R7345	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1		VR7340	EVNE4AA00B14	V.RESISTOR	10K	1
R7346	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1		VR7342	EVNE4AA00B53	V.RESISTOR	5K	1
R7347	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1		VR7344	EVNE4AA00B14	V.RESISTOR	10K	1
R7348	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1						
R7349	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1						
R7351-53	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3				CRYSTAL OSCILLATORS		
R7354,55	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2		X301	VSK0225	CRYSTAL OSCILLATOR		1
R7401	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1		X710	EFCB38MGP1	CRYSTAL OSCILLATOR		1
R7402	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1		X711	VLFO638	CRYSTAL OSCILLATOR		1
R7403	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1		X716,17	EFC440R40M1	FILTER		2
R7405-13	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	9		X801	VSK0406	CRYSTAL OSCILLATOR		1
R7416,17	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2		X3901	VSK0099	CRYSTAL OSCILLATOR		1
R7419	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1		X6001	VSK0415	CRYSTAL OSCILLATOR		1
R7420,21	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2		X6002	VSK0258	CRYSTAL OSCILLATOR		1
R7422-24	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3		X6003	VSQ0565	CRYSTAL OSCILLATOR		1
R7656	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1		X7301,02	EFC55R5MS5B	CRYSTAL OSCILLATOR		2
R7676	ERGISJ152	M.RESISTOR 1W 1.5K	1		X7303,04	EFC55R74MS5B	CRYSTAL OSCILLATOR		2
R7801	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1		X7305	ELB5A016	FILTER		1
R7802	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1		X7851	EFO44R0M03C2	CRYSTAL OSCILLATOR		1
R7803,04	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2						
R7805	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1						
R7806	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1				MISCELLANEOUS		
R7807	ERJ6GEYJ512	M.RESISTOR CH 1/10W 5.1K	1		VJF0442	CLAMPER			1
R7808	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1		VJF0004	CLAMPER			1
R7821	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1		VJF0309	CLAMPER			1
R7822	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1		VJH0650	JACK PLATE			1
R7851	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1		ENC17984	RF CONVERTER			1 (1)
R7860	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1		VWJ160W210BB	FLEXIBLE CADE			1
					VWJ180W150BB	FLEXIBLE CADE			1
					VWJ04NB080QQ	FLEXIBLE CADE			1
		SWITCHES			VM21352	HEAT SINK COVER			1 FOR SERVO C.B.A.
SW3901	VSS0157	SWITCH	1		VEJ1230	JACK PLATE			1 FOR INPUT/OUTPUT





Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
J6302	VJJ0210	CONNECTOR	1	
		COILS		
L6301,02	VLQ0188J221	COIL 220UH	2	
L6501,02	ELESP471KA	COIL 470UH	2	
		CONNECTORS		
P6501,02	VJP3091	CONNECTOR (MALE)	2	
P6503	VJS2357A015	CONNECTOR (FEMALE)	1	
		RESISTORS		
R6501	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6502	ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R6503,04	EROS2CKG2700	M.RESISTOR 1/4W 270	2	
R6505	EROS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R6506,07	EROS2CKG3300	M.RESISTOR 1/4W 330	2	
R6508	EROS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R6509,10	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
		SWITCHES		
SW6501	EVQ11407K	SWITCH	1	
		VARIABLE RESISTORS		
VR3004	EWAKP0D3B24	V.RESISTOR 20K	1	
VR6501	EWAKABXB3C23	V.RESISTOR 2K	1	
VR6503	EWANYJX0554J	V.RESISTOR	1	
		MISCELLANEOUS		
	KL04	LED SPACER	1	
	VYCO160	REC RV PANEL UNIT	1	
	VGU4495	REC VR KNOB	2	
	VJR0691	JACK HOLDER	1	
		VEP07654A		(NLA) NV-FS200EG
		CAPACITORS		
C7501	ECEA1HRS100	E.CAPACITOR 50V 10U	1	
C7502,03	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C7504	ECUM1H1042FN	C.CAPACITOR 50V	1	
C7505	ECEAOJKS330	E.CAPACITOR 6.3V 33U	1	
C7506	ECUM1H2232FN	C.CAPACITOR CH 50V 0.022U	1	
C7507	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C7508	ECEAOJK221	E.CAPACITOR 6.3V 220U	1	
C7509	ECUM1H1042FN	C.CAPACITOR 50V	1	
C7510	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C7511	BCRHA030E41	TRIMMER 3P	1	
C7512	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7513	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7514	ECUM1H1042FN	C.CAPACITOR 50V	1	
C7515	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C7516	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7517	ECUM1H1042FN	C.CAPACITOR 50V	1	
C7519	ECEAOJKS470	E.CAPACITOR 6.3V 47U	1	
C7520	ECUM1H1042FN	C.CAPACITOR 50V	1	
C7521	ECEAOJKS470	E.CAPACITOR 6.3V 47U	1	
C7523-36	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	14	
C7537,38	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C7539,40	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C7541	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C7542,43	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C7544,45	ECQB1H473JH	P.CAPACITOR 50V 0.047U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		DIODES		
D7501	MA3068	DIODE	1	
D7502	MA73	DIODE	1	
D7509-17	MA73	DIODE	9	
D7522,23	MA73	DIODE	2	
D7525-27	MA73	DIODE	3	
D7531-33	MA73	DIODE	3	
D7535	MA73	DIODE	1	
D7538	MA73	DIODE	1	
D7540	MA73	DIODE	1	
D7543,44	LN28RCPL	DIODE	2	
D7546	LN38GCPL	DIODE	1	
D7547,48	LN28RCPL	DIODE	2	
D7550	LN48YCPL	DIODE	1	
D7551	VLL0062	DIODE	1	
D7552	MA73	DIODE	1	
D7556,57	MA73	DIODE	2	
		DISPLAY TUBES		
DP7501	VSL0144	DISPLAY TUBE	1	
		INTEGRATED CIRCUITS		
IC7501	MN187164VLT	IC	1	
IC7502	BA6810S	IC	1	
IC7503	M6800021P	IC	1	
IC7505	MN1280K	IC	1	
IC7506	MN1280S	IC	1 (S)	
IC7507	M34225V1AH	IC	1	
		COILS		
L7501	ELESP221KA	COIL 220UH	1	
		CONNECTORS		
P7501	VJS3193F018A	CONNECTOR (FEMALE)	1	
P7502	VJS3193F016A	CONNECTOR (FEMALE)	1	
P7503	VJS2357A020	CONNECTOR (FEMALE)	1	
P7504	VJP2621	CONNECTOR (MALE)	1	
		COMBINATION PARTS		
QR7501,02	MRN2403	TRANSISTOR-RESISTOR	2	
QR7503	MRN2402	TRANSISTOR	1	
QR7504	MRN1404	TRANSISTOR	1	
		RESISTORS		
R7504	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7505	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R7506	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7508	ERJ6GEV223	M.RESISTOR CH 1/10W 22K	1	
R7509	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7510-12	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R7513	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7514	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7515	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7516	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R7517-20	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7521	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7522,23	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7524-26	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7528,29	ERJ6QM20R00	M.RESISTOR CH 1/10W 0	2	
R7531-33	ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	3	
R7535	ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R7536	ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R7543,44	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7545	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7546-48	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7549	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7550-54	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	5	



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		VARIABLE RESISTORS		
VR7501	EVNIXAA00853	V.RESISTOR 5K	1	
		CRYSTAL OSCILLATORS		
X7501	VSK0484	CRYSTAL OSCILLATOR	1	
X7502	VSK0094	CRYSTAL OSCILLATOR	1	
X7503	EFOGC3584A5		1	
		MISCELLANEOUS		
	VEK5789	IR RECEIVER UNIT	1 (NLA) <1>	
	VJF0693	FTP HOLDER	1	
	VJF0740	LED SPACER	1	
	VMD1342	LED SPACER	1	
	VEPO677BA	JOG C.B.A.		(NLA)
		DIODES		
D6701-03	LN38GCPV	DIODE	3	
		CONNECTORS		
F6701	VJS2621	CONNECTOR (FEMALE)	1	
		RESISTORS		
R6701-03	ERDS2TJ221	C.RESISTOR 1/4W 220	3	
		SWITCHES		
SW6701	EVQ11407K	SWITCH	1	
		MISCELLANEOUS		
	VMD1652	LED SPACER	3	
	VSQ0798	JOG ENCODER	1	
	VEPO1381J	POWER C.B.A.		(NLA) <1>
		CAPACITORS		
C1101,02	ECQU2A224MN	P.CAPACITOR 250V 0.22U	2 <1>	
C1105	VCC0021	C.CAPACITOR	1 <1>	
C1108	VCC0021	C.CAPACITOR	1 <1>	
C1111	VCC0023	CAPACITOR	1 <1>	
C1112	ECOS2GA121G	E.CAPACITOR 400V 120U	1	
C1113	ECQA2GNK010X	CAPACITOR	1	
C1114	ECQE6473B11	P.CAPACITOR	1	
C1115	ECMD3D331K1N	C.CAPACITOR 2KV 330P	1	
C1116	ECQB1H682J2	P.CAPACITOR 50V 6800P	1	
C1117	ECALCKL9470	E.CAPACITOR 16V	1	
C1118	ECQB1H103J2	P.CAPACITOR 50V 0.01U	1	
C1119	ECQV1H334JF	P.CAPACITOR 50V 0.33U	1	
C1120	ECQP1101J2	P.CAPACITOR 100V 100P	1	
C1121	ECBA1HFE121	E.CAPACITOR 50V 120U	1	
C1122,23	ECALCF2122	E.CAPACITOR 16V 1200U	2	
C1124	ECBA1AF2102	E.CAPACITOR 10V 1000U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1126	ECBA1VFE820	E.CAPACITOR 35V 82U	1	
C1127	ECBA1HGE100	E.CAPACITOR 50V 10U	1	
C1128-30	ECBA1AGE101	E.CAPACITOR 10V 100U	3	
C1131	ECBA1CFE331	E.CAPACITOR 16V 330U	1	
C1132	ECQF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1137	ECQF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1138	ECBA1GGE100	E.CAPACITOR 16V 10U	1	
C1139	ECQV1H105J2	P.CAPACITOR 50V 1U	1	
C1141	ECBA1HFE270	E.CAPACITOR 50V 27U	1	
		DIODES		
DI102-05	EM1B	DIODE	4 <1>	
DI106	VSD0002	DIODE	1 <1>	
DI107	AF01C	DIODE	1	
DI108	MA4030L	DIODE	1	
DI109	MA178	DIODE	1	
DI110	MA165VT	DIODE	1	
DI111	ERA22-02	DIODE	1	
DI112	FMLG12SP	DIODE	1	
DI113	10ELS2	DIODE	1	
DI114	FMBG14L	DIODE	1	
DI116	MA2160A	DIODE	1	
DI117	MA4130L	DIODE	1	
		INTEGRATED CIRCUITS		
IC1101	STRD6009E	IC	1 <1>	
IC1102	STRK392	IC	1	
IC1103	SFD14N	IC	1	
		COILS		
LI101,02	ELF18D221F	COIL	2 <1>	
LI103	ELCO7B009	COIL	1	
LI104,05	VLQEL06F101K	COIL 100UH	2	
LI106	ELCO7B009	COIL	1	
		CONNECTORS		
PI101	VJP1930T	CONNECTOR (MALE)	1	
PI102	VJS2625	CONNECTOR (FEMALE)	1 <1>	
PI103	VJP1149	CONNECTOR (MALE)	1	
		TRANSISTORS		
Q1101	PC111AD	TRANSISTOR	1 <1>	
Q1102	ZSD1330	TRANSISTOR	1	
		RESISTORS		
R1101	ERC12AGM334	S.RESISTOR 1/2W 330K	1 <1>	
R1102,03	ERDS1TJ563	C.RESISTOR 1/2W 56K	2	
R1104,05	ERDS2TJ474	C.RESISTOR 1/4W 470K	2	
R1106	ERC3ANJ68.3	M.RESISTOR 3W 68K	1	
R1107	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1108	ERD2FTUG681	C.RESISTOR 1/4W 680	1 <1>	
R1109	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R1110	ERW1HK2R2	W.RESISTOR 1W	1	
R1111,12	ERG2SJB20	M.RESISTOR 2W 82	2	
R1113,14	ERG2SJ560	M.RESISTOR 2W 56	2	
R1115	ERGISJ182	M.RESISTOR 1W 1.8K	1	
R1116	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1117	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R1118	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
		TRANSFORMERS		
TI101	VLTO685	TRANSFORMER	1 <1>	
		MISCELLANEOUS		
	VJF0318	FUSE HOLDER	4 <1>	
	VME1184	CAPACITOR COVER (B)	2 <1>	



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
FL9008	ELKAH103EB	FILTER	1	
FL9009	VLFO839	FILTER	1	
FL9010	VLFO838	FILTER	1	
FL9011	VLFO874	FILTER	1	
FL9012	VLFO855	FILTER	1	
FL9013	ELB4PO34	FILTER	1	
FL9014	VLFO875	FILTER	1	
FL9015-17	VLFO634	FILTER	3	
FL9020, 21	VLFO634	FILTER	2	
FL9025	VLFO634	FILTER	1	
FL9026	ELKAH101GB	FILTER	1	
FL9027	ELKAH103EB	FILTER	1	
FL9028	VLFO634	FILTER	1	
		INTEGRATED CIRCUITS		
IC9001	AN3942SB	IC	1	
IC9002	AN3496S	IC	1	
IC9003	MN74HC4066S	IC	1	
IC9004, 05	HA19211BNT	IC	2	
IC9006	AN3915S	IC	1	
IC9007, 08	SC41547FU	IC	2	
IC9009	MN73026VME	IC	1	
		COILS		
L9001	VLQ0188J2R2	COIL 2.2UH	1	
L9002, 03	VLQEL05F101K	COIL 100UH	2	
L9004	VLQEL05F60K	COIL 60UH	1	
L9005	VLQEL05F270K	COIL 27UH	1	
L9006	VLQ0188J2R2	COIL 2.2UH	1	
L9007	VLQEL05F101K	COIL 100UH	1	
L9008, 09	VLQ0188J2R2	COIL 2.2UH	2	
L9010	VLQ0188J6R8	COIL 6.8UH	1	
L9011-14	VLQ0188J2R2	COIL 2.2UH	4	
L9018, 19	VLFO054	COIL	2	
L9024	VLFO054	COIL	1	
		CONNECTORS		
P9001	VJP3080	CONNECTOR (MALE)	1	
P9002	VJF1231T	CONNECTOR (MALE)	4P	
		TRANSISTORS		
Q9001	MSB709	TRANSISTOR	1	
Q9002	MSD601	TRANSISTOR	1	
Q9003	MSB709	TRANSISTOR	1	
Q9004	MSD601	TRANSISTOR	1	
Q9005, 06	MSB709	TRANSISTOR	2	
Q9007-09	MSD601	TRANSISTOR	3	
Q9010, 11	MSB709	TRANSISTOR	2	
Q9012	MSD601	TRANSISTOR	1	
Q9013, 14	MSB709	TRANSISTOR	2	
Q9015	MSD601	TRANSISTOR	1	
Q9016	2SC2295	TRANSISTOR	1	
Q9017	MSD601	TRANSISTOR	1	
Q9018	MSB709	TRANSISTOR	1	
Q9019	MSD601	TRANSISTOR	1	
Q9020	2SC2295	TRANSISTOR	1	
Q9021	MSD601	TRANSISTOR	1	
Q9022	MSB709	TRANSISTOR	1	
Q9023	MSD601	TRANSISTOR	1	
Q9024	MSB709	TRANSISTOR	1	
Q9025	MSD601	TRANSISTOR	1	
		COMBINATION PARTS		
QR9007, 08	MRN1404	TRANSISTOR	2	
QR9010	MRN1404	TRANSISTOR	1	
QR9012-14	MRN1404	TRANSISTOR	3	
		RESISTORS		
R9001-06	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R9007	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9008, 09	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9010, 11	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R9014, 15	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9017, 18	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9019	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R9020-23	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R9024	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R9025	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9026	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R9027-29	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	3	
R9030	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R9031	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R9037	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9038	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R9039	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9040	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9041	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9042	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R9043	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9044	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9045	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9046	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R9047, 48	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9049	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R9050	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R9051, 52	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	2	
R9053	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9054, 55	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	2	
R9056	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9057	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9058	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R9059, 60	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9061	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R9062	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9063, 64	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R9065	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R9066	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R9067	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9068-70	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R9071	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R9072, 73	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9074	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R9075	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9076	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R9077	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R9078	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9079	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R9080, 81	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9082	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R9083	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9084	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9085, 86	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R9087	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9088	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9089	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9090	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9091, 92	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9093	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9094	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9095	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9096	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9097	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R9098	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R9099	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R9100	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R9101	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9104	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9106-08	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R9109, 10	ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	
R9111	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R9112	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9113	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9114	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R9117	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	



V 1184



(D) Btx \*32700 #

## Laufwerk G 2

(3-Motoren-Laufwerk)

# Drive Mechanism G 2

(3-motor drive mechanism)

(D)

(GB)

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### Meßgeräte / Meßmittel

- Zweikanaloszilloskop
- Regeltrenntrafo
  
- Kopfscheibenabzieher (VFK 0341)
- Referenzplatte (VFK 0387)
  
- Einstellplatte (VFK 0191)
- Höhenmeßuhr (VFK 0190)
- Höhenlehre (VFK 0344)
- Bandzugmesser (VFK 0132)
- Kontaktor (0,1N...1N)
- Kontaktor (0,5N...5N)
- Einstellschraubendreher
- Sechskant-Stiftschlüssel 2mm
- Testcassette
- Testcassette (HiFi)

### Test equipment / aids

- Dual channel oscilloscope
- Variable isolating transformer
  
- Head wheel extractor (VFK 0341)
- Tension post adjustment plate (VFK 0387)
- Post adjustment plate (VFK 0191)
- Dial hight gauge (VFK 0190)
- Hight gauge (VFK 0344)
- Tape tension meter (VFK 0132)
- Tension gauge (0.1N...1N)
- Tension gauge (0.5N...5N)
- Post adjustment screw driver
- Hexagonal wrench 2mm
- Test cassette
- Test cassette (HiFi)

z.B. / e.g. GRUNDIG  
MO 20, MO 53  
RT 5 A

- Sach-Nr. / Part no**
- 75987 - 262.96
  - 75987 - 262.87
  - 75987 - 262.74
  - 72001 - 401.00
  - 72001 - 403.00
  - 75987 - 262.80
  - 72004 - 082.00
  - 9.27540 - 1011
  - 9.27540 - 1016

Die Meßmittel können Sie über die Serviceorganisation beziehen. Wir weisen jedoch darauf hin, daß diese z.T. bereits am Markt eingeführt sind.

You can order the test equipments from the Service organization. We refer to you that these test equipments are already obtainable on the market.

## 1. Absenken des Cassettenschachtes von Hand (ohne Cassette)

- Netzstecker ziehen.
- Riemenscheibe (137) ca. 3 Umdrehungen im Uhrzeigersinn drehen.
- Sicherungshebel (P) ausrasten (Fig. 1).
- Riemenscheibe (137) um eine Umdrehung weiterdrehen.
- Hebel (Q) nach unten drücken und Sicherungshebel (P) erneut ausrasten.
- Cassettenschacht durch Weiterdrehen der Riemenscheibe (137) vollständig absenken

## 1. Lowering the Cassette Compartment by Hand (without cassette)

- Disconnect the machine from mains.
- Rotate the drive belt pulley (137) approx. 3 revolutions in the clockwise direction.
- Release the locking lever (P) (Fig. 1).
- Rotate the drive belt pulley (137) by one more revolution.
- Push the lever (Q) down and release the locking lever (P) once again.
- Lower the cassette compartment fully by rotating the drive belt pulley (137) further in a clockwise direction.

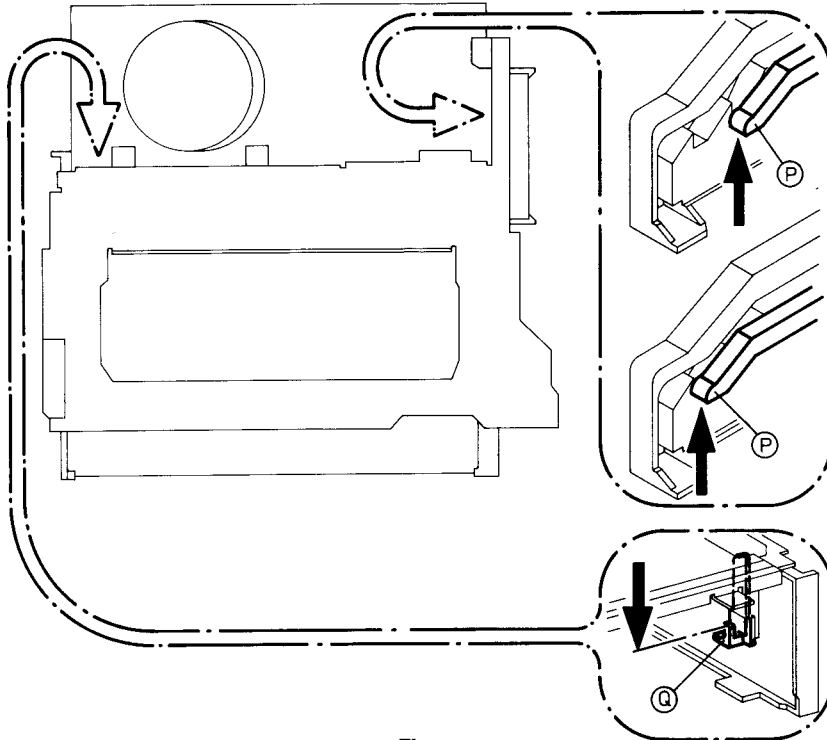


Fig. 1

## 2. Cassettenauswurf von Hand

- a) Netzstecker ziehen
- b) Umstellhebel (122) durch Drücken in Pfeilrichtung (Fig. 2) ausrasten.
- c) Capstanrotor langsam gegen den Uhrzeigersinn drehen, bis die Kupplungsscheibe (116) einrastet.
- d) Schritte b) und c) wiederholen bis die Cassette ausgeworfen wird.

## 2. Ejecting the Cassette by Hand

- a) Disconnect the machine from the mains.
- b) Disengage the change-over lever (122) by pressing it in the direction of the arrow (Fig. 2).
- c) Rotate the capstan rotor slowly anti-clockwise until the clutch disk (116) locks.
- d) Repeat steps b) and c) until the cassette is ejected.

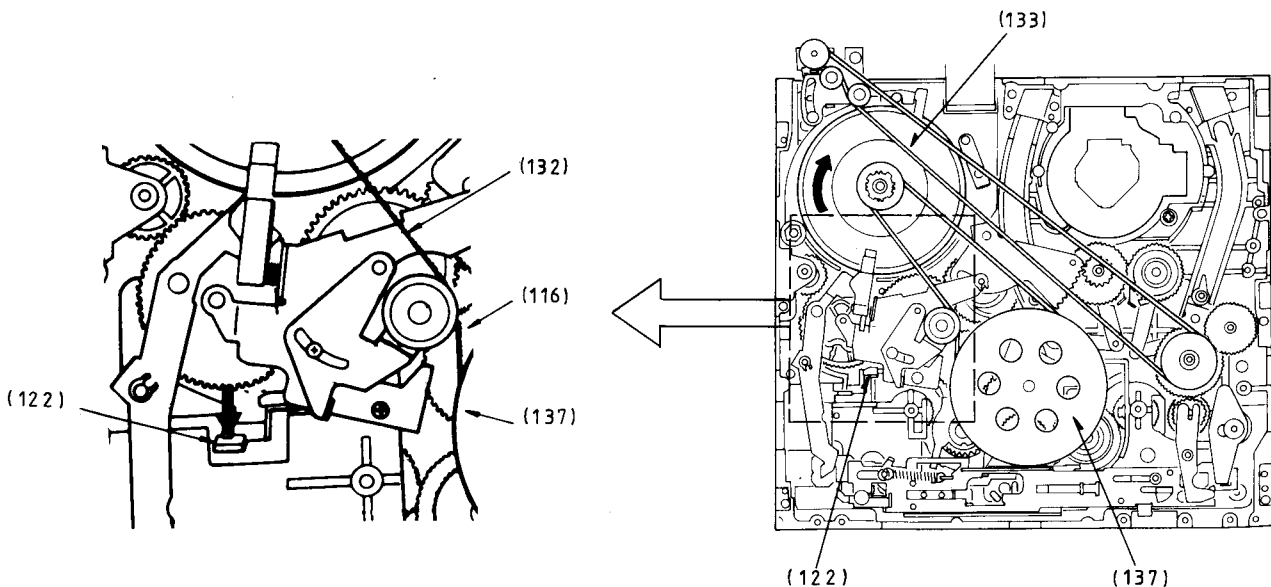


Fig. 2



### 3. Ausbau des Cassettenschachts

- 2 Schrauben "A" herausdrehen (Fig. 3).
- Cassettenschacht durch Drehen des Capstanrotors (133) im Uhrzeigersinn soweit bewegen, bis die 2 Schrauben "B" entfernt werden können.
- Steckverbindung P1508 abziehen und Cassettenschacht herausnehmen.

### 4. Einbau des Cassettenschachtes

- Umstellhebel (122), Fig. 2, oder Kern der Spule (66), Fig. 4, in Pfeilrichtung drücken, um die Verriegelung zu öffnen.
- Capstanrotor entgegen dem Uhrzeigersinn drehen bis die Mechanik die Stellung "Auswerfen" erreicht hat (Endanschlag).
- Lage des Markierungslochs (a) oder der Markierungsnase (d) des Zwischenrades (65) merken (Fig. 5) und Capstanrotor in entgegengesetzter Richtung solange drehen, bis das Zwischenrad (65) eine Umdrehung entgegen dem Uhrzeigersinn gemacht hat.
- Cassettenschacht soweit verschieben, bis der 2. Zahn der Zahnstange (224) über dem rechtwinkligen Loch "C" liegt (Fig. 6).
- Gegebenenfalls 2 Schrauben "D" herausdrehen und Abdeckplatte (201) entfernen, sodaß die Zahnstange (224) und das Zwischenrad (65) beim Einbau zu sehen sind.
- Cassettenschacht so in das Laufwerk einsetzen, daß der 2. Zahn der Zahnstange (224) in der 5. Zahnücke des Zwischenrades (65) eingreift (Fig. 7). Gegebenenfalls Cassettenschacht geringfügig verschieben.
- Abdeckplatte (201) montieren und die 6 Schrauben in der Reihenfolge "D", "A", "B" eindrehen (Fig. 3, Fig. 6)
- Steckverbindung P 1508 kontaktieren

#### Hinweis:

Falls die Schachtfunktionen nicht richtig ausgeführt werden, Einbau wiederholen.

### 3. Removing the Cassette Compartment

- Remove the 2 screws "A" (Fig. 3).
- Rotate the capstan rotor (133) to move the cassette compartment so that it is possible to remove the 2 screws "B".
- Pull out the plug-type connector P1508 and remove the cassette compartment.

### 4. Refitting the Cassette Compartment

- Press the change-over lever (122), Fig. 2, or the core of the solenoid (66), Fig. 4, in the direction of the arrow to disengage the lever.
- Rotate the capstan rotor in the anti-clockwise direction until the mechanics reaches the "Eject" position (end stop).
- Note the position of the marking hole (a) or the marking lug (d) on the intermediate gear (65), Fig. 5, and rotate the capstan rotor in the opposite direction until the intermediate gear (65) makes one complete revolution in anti-clockwise direction.
- Move the cassette compartment so that the 2nd tooth of the toothed rack (224) is positioned over the right angled hole "C" (Fig. 6).
- If necessary, remove the 2 screws "D" and remove the top plate (201) so that the toothed rack (224) and the intermediate gear (65) can be seen during assembly.
- Insert the cassette compartment into the mechanics so that the 2nd tooth of the toothed rack (224) engages with the 5th tooth space of the intermediate gear (65) (Fig. 7). If necessary move the cassette by a small amount.
- Fit the top plate (201) and tighten the 6 screws in the sequence "D", "A", "B" (Fig.3, Fig.6).
- Reconnect the plug connector P1508.

#### Note:

If the functions of the cassette compartment are not carried out correctly, repeat the assembly procedure.

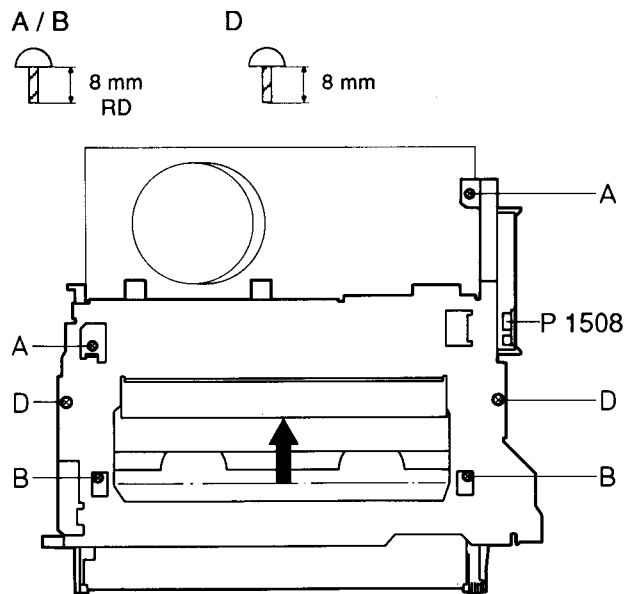


Fig. 3

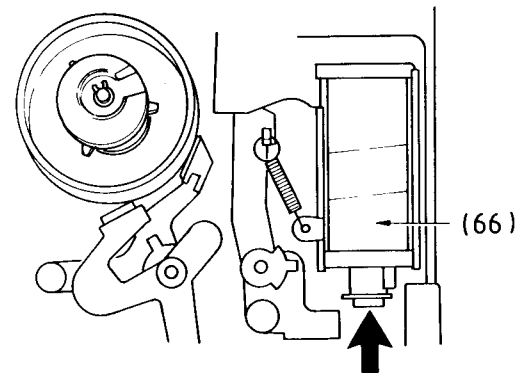


Fig. 4

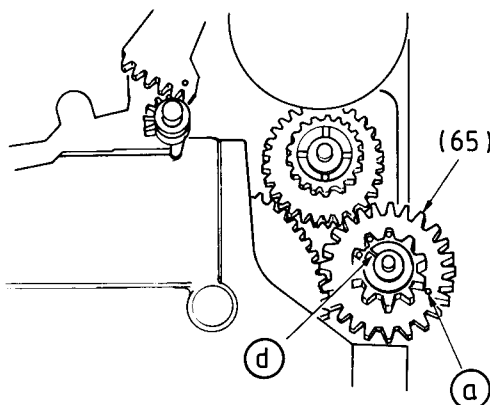


Fig. 5

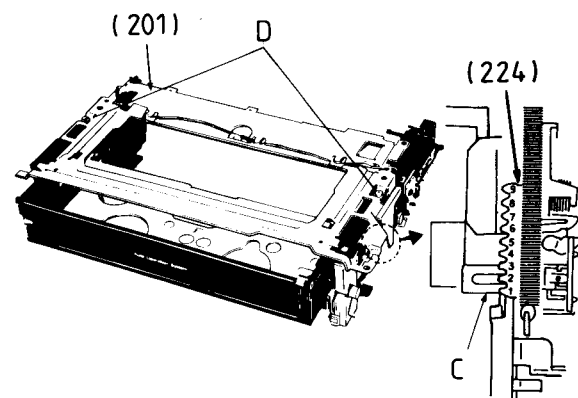


Fig. 6

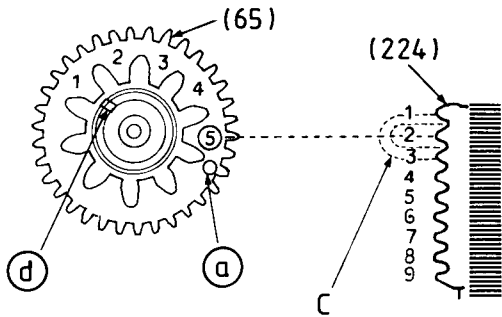


Fig. 7

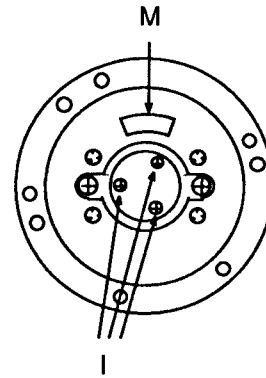


Fig. 8

## 5. Arbeiten am Bandtrommelbaustein

### 5.1 Austausch der Kopfscheibe (7)

**Service Mittel:** Kopfscheibenabzieher

**Achtung:**

- Die Kopfscheibe sitzt sehr fest auf der Antriebsachse. Arbeiten Sie deshalb mit äußerster Sorgfalt und berühren Sie die Videoköpfe nicht!
- Wenn sich nach dem Einbau die weißen Flächen "M" (Fig. 12) nicht decken, erfolgt die Wiedergabe vorher durchgeführter Aufnahmen in Schwarz / Weiß!
- Die 3 Schrauben "I" nicht lösen (Fig. 8)!

**Ausbau:**

- Schrauben "F", "H" herausdrehen und Erdungsfeder (5) entfernen (Fig. 9 / Fig. 10).
- Kopfscheibenanschlüsse "K" entlöten, Außenring der Kopfscheibe (7) leicht anwärmen (z.B. Föhn) und Kopfscheibe (7) vorsichtig abziehen (Fig. 10).

Gegebenenfalls Kopfscheiben-Abziehvorrichtung verwenden (Fig.11). Hierzu die Abziehvorrichtung in den Gewindelöchern "L" der Kopfscheibe befestigen und den Handgriff im Uhrzeigersinn drehen bis die Kopfscheibe von der Achse abgezogen ist.

**Einbau:**

- Kopfscheibe (7) so auf die Antriebsachse stecken, daß sich die weißen Flächen "M" decken (Fig. 12).
- Schrauben "H" eindrehen und Erdungsfeder (5) montieren.
- Kopfscheibenanschlüsse "K" anlöten.

## 5. Working on the Tape Drum Module

### 5.1 Replacing the Head Wheel (7)

**Service Aid:** Head Wheel Extractor

**Attention:**

- The Head Wheel is fitted very tightly onto the drive shaft. Therefore, when carrying out service work be very careful and especially ensure that the video heads are not touched!
- If, after reassembly, the white areas "M" (Fig. 12) do not coincide, previous recordings on the tape will be reproduced on playback in black and white!
- Do not loosen the 3 screws "I" (Fig. 8)

**Removing:**

- Remove the screws "F" and "H" and then the earthing spring (5) (Fig. 9 / Fig. 10).
- Unsolder the head wheel connections "K". Warm up the outer ring of the head wheel (e.g. Hairdryer) and pull the head wheel (7) off carefully (Fig. 10).
- If necessary use the head wheel extractor (Fig.11). For this locate the extractor into the holes "L" drilled in the head wheel and rotate the handle in the clockwise direction until the head wheel is pulled off the shaft.

**Refitting:**

- Fit the head wheel (7) onto the shaft so that the white areas "M" coincide (Fig.12).
- Refit the screws "H" and the earthing spring (5) with screw "F".
- Resolder the head wheel connections "K".

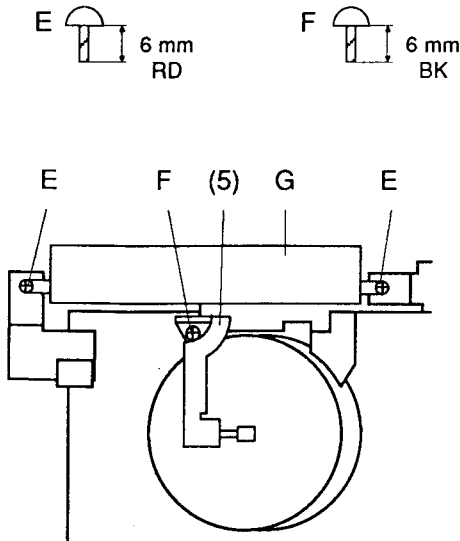


Fig. 9

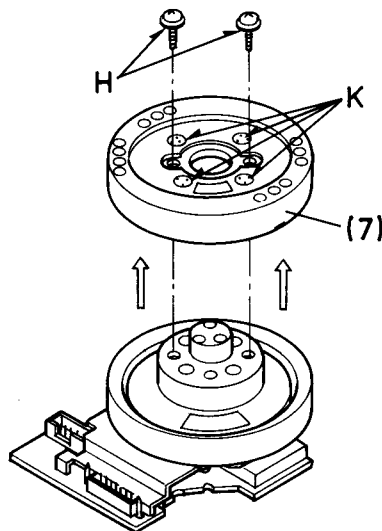


Fig. 10

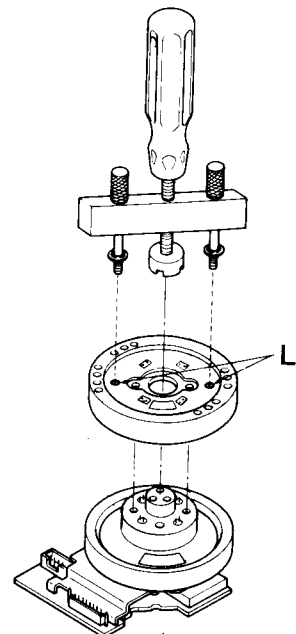


Fig. 11

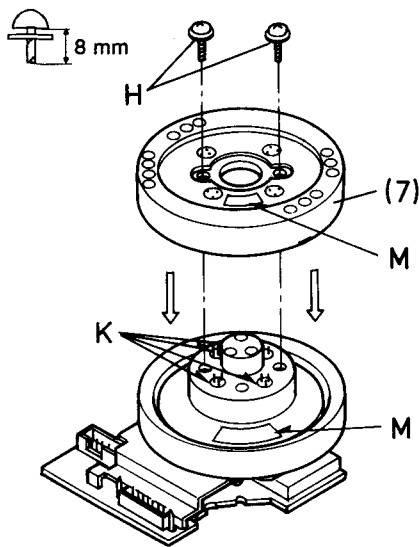


Fig. 12

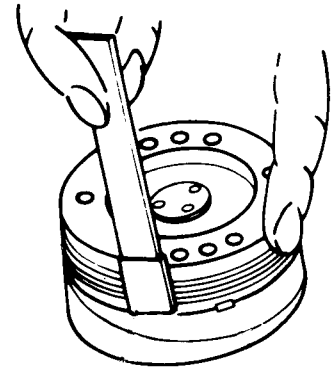


Fig. 13

### 5.2 Reinigen der Kopscheibe

- Kopscheibe festhalten und Videoköpfe mit einem spiritusgetränkten Reinigungsstäbchen in Bandlaufrichtung vorsichtig abreiben (Fig. 13).

### 5.2 Cleaning the Head Wheel

- Hold the head wheel stationary and clean the video heads with a cleaning stick soaked with spirit by wiping carefully in the direction of the tape transport (Fig. 13).

### 5.3 Austausch des Bandtrommelbausteins

#### Ausbau des Bandtrommelbausteins (6)

- 3 Schrauben "E" und "F" herausdrehen (Fig. 9).
- Kopfverstärker "G" und Erdungsfeder (5) entfernen.
- Steckverbindungen lösen.
- 3 Schrauben "N" entfernen (Fig. 14) und Bandtrommelbaustein (6) vorsichtig aus dem Laufwerk ziehen.

#### Einbau des Bandtrommelbausteins (6)

- Bandtrommelbaustein (6) ins Laufwerk stecken und 3 Schrauben "N" eindrehen (Fig. 14).
- Erdungsfeder (5) mit Schraube "F" befestigen (Fig. 9).
- Kopfverstärker "G" und Steckverbindungen kontaktieren.
- 2 Schrauben "E" eindrehen
- Bandlauf- / Kompatibilitätseinstellung prüfen (Kap. 6.8)

### 5.3 Replacing the Tape Drum Module

#### Removing the Tape Drum Module (6)

- Remove the 3 screws "E" and "F" (Fig. 9).
- Remove the head amplifier "G" and the earthing spring (5).
- Loosen the plug connectors.
- Remove the 3 screws "N" (Fig. 14) and pull the Tape Drum Module (6) carefully out of the mechanics.

#### Refitting the Tape Drum Module (6)

- Place the Tape Drum Module (6) into the mechanics and tighten the 3 screws "N" (Fig. 14).
- Refit the earthing spring (5) with the screw "F" (Fig. 9).
- Reconnect the Head Amplifier "G" and the plug connectors.
- Refit the 2 screws "E".
- Check the Tape Transport/Compatibility Adjustment (para 6.8)

### 5.4 Austausch der Kopscheiben-Motorsteuerplatte

- Bandtrommelbaustein gemäß Kap. 5.3 ausbauen.
- Lötstelle "O" öffnen und Abschirmung entfernen (Fig. 15).
- 18 Lötstellen "P", einschließlich der 10 in der Abbildung Fig. 15 nicht sichtbaren, öffnen.
- 2 Schrauben "Q" herausdrehen und Kopscheiben-Motorsteuerplatte entfernen.

Der Einbau erfolgt in umgekehrter Reihenfolge.

### 5.4 Replacing the Head Wheel-Motor Drive Panel

- Remove the Tape Drum Module as described in para 5.3.
- Unsolder the solder pads "O" and remove the screen (Fig. 15).
- Open the 18 solder connections "P" including the 10 not visible in the illustration (Fig. 15).
- Undo the 2 screws "Q" and remove the Head Wheel-Motor Drive Panel.

For reassembly, reverse the sequence.

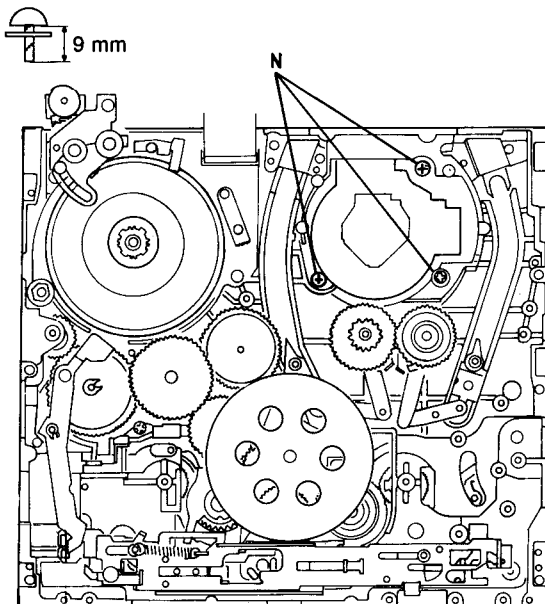


Fig. 14

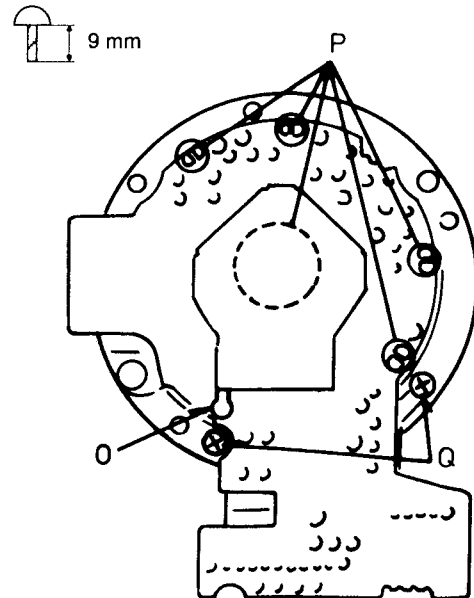


Fig. 15

## 5.5 Austausch des Kopfscheiben-Motorsteuer-IC's

- Kopfscheiben-Motorsteuerplatte gemäß Kapitel 5.4 ausbauen.
  - Schraube "R" (Fig. 16) und Kühlblech entfernen.
  - IC auslöten.
- Der Einbau erfolgt in umgekehrter Reihenfolge.

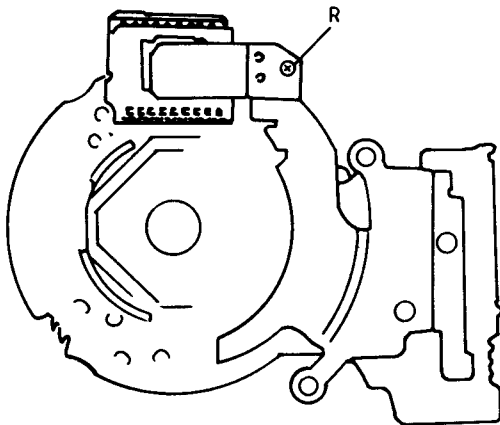
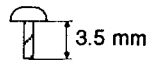


Fig. 16

## 5.5 Replacing the Head Wheel-Motor Drive IC

- Remove the Head Wheel-Motor Drive Panel as described in para 5.4.
  - Release the screw "R" (Fig. 16) and the heat sink.
  - Unsolder the IC.
- For reassembly, reverse the sequence.

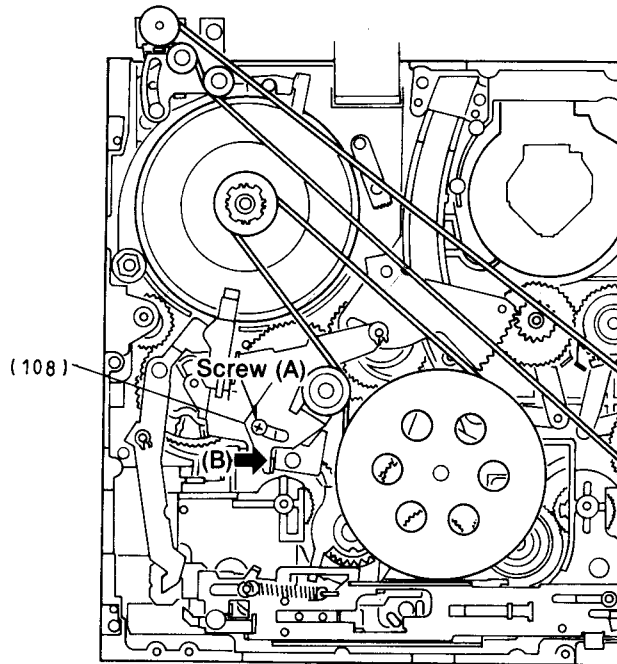


Fig. 17

## 6. Mechanische Einstellungen

### 6.1 Einstellen der Riemen­spannung des Capstan-motors

**Meßmittel:** Kontaktor (0,1N - 1N)

- Schraube (A) lösen (Fig. 17).
- Kontaktor am Punkt (B) ansetzen und Spannrollenhebel (108) in Pfeilrichtung (B) drücken.
- Zeigt die Skala des Kontaktors  $0,4 \text{ N} \pm 0,05 \text{ N}$  (Einstellwert) an, Schraube (A) anziehen.

### 6. Mechanical Adjustments

#### 6.1 Adjusting the Belt Tension of the Capstan Motor

**Service Aid:** Tension gauge (0.1N - 1N)

- Loosen the screw (A), (Fig. 17).
- Fit the Tension Gauge to point (B) and press the tension roller lever (108) in the direction of the arrow (B).
- When the Tension Gauge indicates  $0.4 \text{ N} \pm 0.05 \text{ N}$  (Specified Value), tighten the screw (A).

### 6.2 Einstellen der Riemen­spannung des Umspul-motors

**Meßmittel:** Kontaktor (0,5N - 5N)

- Schraube (C) lösen (Fig. 18).
- Kontaktor am Punkt (D) ansetzen und Spannrollenhebel (93) in Pfeilrichtung (D) drücken.
- Zeigt die Skala des Kontaktors  $2,25 \text{ N} \pm 0,25 \text{ N}$  (Einstellwert) an, Schraube (C) anziehen.

#### 6.2 Adjusting the Belt Tension of the Capstan Motor

**Service Aid:** Tension gauge (0.5N - 5N)

- Loosen the screw (C), (Fig. 18)
- Fit the Tension Gauge to point (D) and press the tension roller lever (93) in the direction of the arrow (D).
- When the Tension Gauge indicates  $2.25 \text{ N} \pm 0.25 \text{ N}$  (Specified Value), tighten the screw (C).

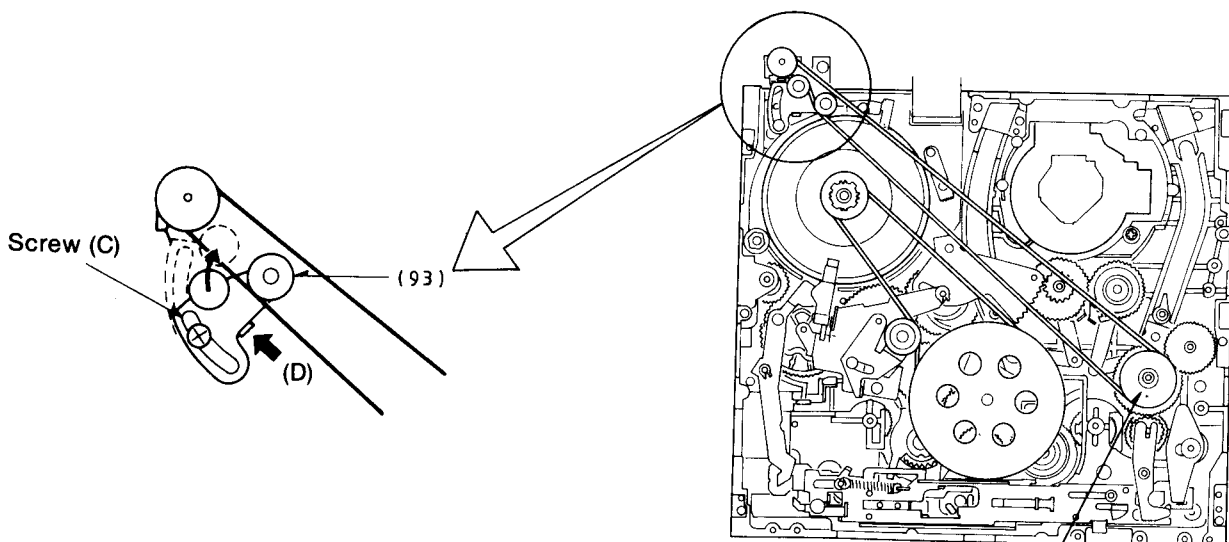


Fig. 18

(151)

### 6.3 Lageeinstellung des Bandzugfühlers

**Meßmittel:** Referenzplatte, Sechskantstiftschlüssel 2mm

- Gerät vom Netz trennen.
- Cassettenschacht ausbauen (Kap. 3).
- Umstellhebel (122) drücken und Capstanrotor (133) im Uhrzeigersinn drehen bis der Einfädelvorgang abgeschlossen ist (Fig. 19). Dabei den Umschalthebel (122) wiederholt ausrasten.
- Referenzplatte auflegen.
- Exzenter "S" der Bremsbandbefestigung mit dem Sechskantstiftschlüssel so einstellen, daß der Bandzugbolzen "T" gerade die Referenzplatte berührt (Fig. 20).
- Referenzplatte entfernen und Capstanrotor (133) solange entgegen dem Uhrzeigersinn drehen, bis ausgefädelt ist. Dabei den Umschalthebel (122) wiederholt ausrasten.
- Cassettenschacht einbauen (Kap. 4).

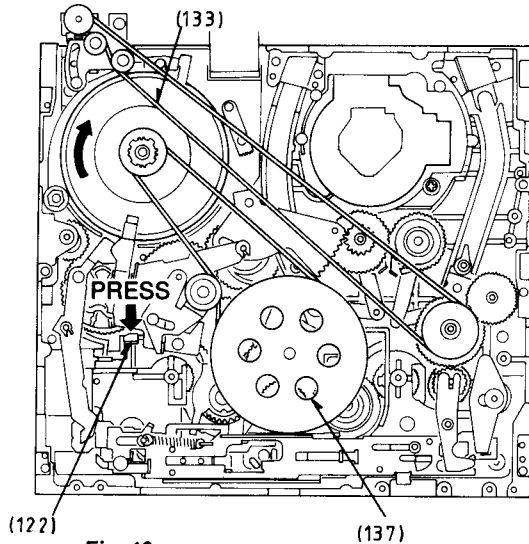


Fig. 19

### 6.3 Adjustment of the Tape Tension Sensor position

**Service Aid:** Tension post adjustment plate, Hexagon Wrench (Allen Key) 2mm

- Disconnect the recorder from the mains.
- Remove the cassette compartment (para 3)
- Press the change-over lever (122) and rotate the capstan rotor (133) in the clockwise direction until the loading-in process is completed (Fig. 19). In doing so, disengage the change-over lever (122) repeatedly.
- Fit the Tension Post Adjustment Plate.
- Adjust the cam "S" on the brake band securing point with the hexagon wrench so that the tape tension bolt "T" just touches the Tension Post Adjustment Plate (Fig. 20).
- Remove the Tension Post Adjustment Plate and rotate the capstan rotor (133) in the anti-clockwise direction until the mechanics unloads. In doing so, disengage the change-over lever (122) repeatedly.
- Refit the cassette compartment (para 4).

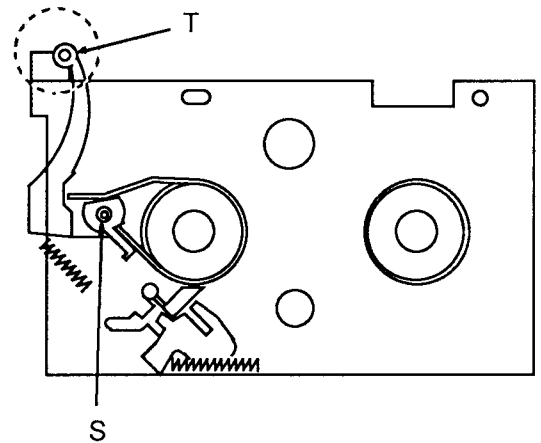


Fig. 20

### 6.4 Messen und Einstellen des Bandzuges

**Meßmittel:** Bandzugmesser, A/W-Cassette E 120

- A / W-Cassette E 120 vom Bandanfang an abspielen
- Nach ca. 20 Sekunden den Bandzugmesser "BZ" nach Fig.21 in den Bandlauf einfügen.
- Weicht der abgelesene Bandzug vom Sollwert 0,2 N ... 0,25 N ab, den Bandzug durch Umhängen der Feder (12) auf den Sollwert einstellen (Fig. 22).

**Hinweis:** Während der Messung müssen die Fühler des Bandzugmessers guten Kontakt zum Band haben. Messung mehrmals wiederholen.

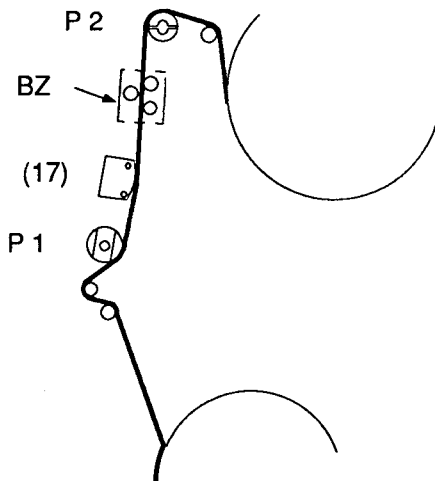


Fig. 21

### 6.4 Measuring and Adjusting the Tape Tension

**Service Aids:**

- Tape tension meter, Record / Playback cassette E120
- Playback the R/P Cassette E120 from the beginning.
- After about 20 seconds fit the Tape Tension Meter "BZ" as shown in Fig. 21.
- If the measured value is different from the specified value of 0.2N ... 0.25N, relocate the spring (12) to obtain the specified value (Fig. 22).

**Note:** When making measurements, ensure that the probes of the meter are in good contact with the tape. Repeat this measurement several times.

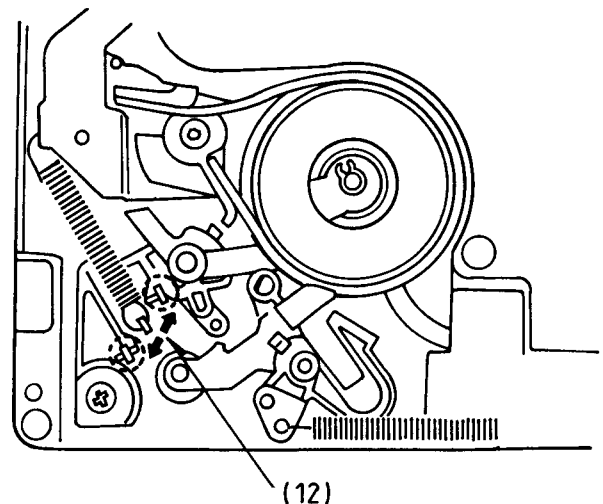


Fig. 22

## 6.5 Einstellen des Capstanrotors (133)

**Meßmittel:** Höhenmeßuhr, Höhenlehre

- Einstellschraube (41), Fig. 23, soweit herausdrehen, bis sich Capstanstator (135) und -rotor (133) gerade berühren.
- Höhenlehre "U" auf den Capstanrotor (133) legen und Höhenmeßuhr nach Abbildung Fig. 24 auf dem geschliffenen Laufwerkrand positionieren. Skala der Höhenmeßuhr auf Null stellen.
- Mit der Einstellschraube (41) Abstand zwischen Capstanrotor (133) und -stator (135) auf 0,5 mm...0,55 mm einstellen (Fig. 25).

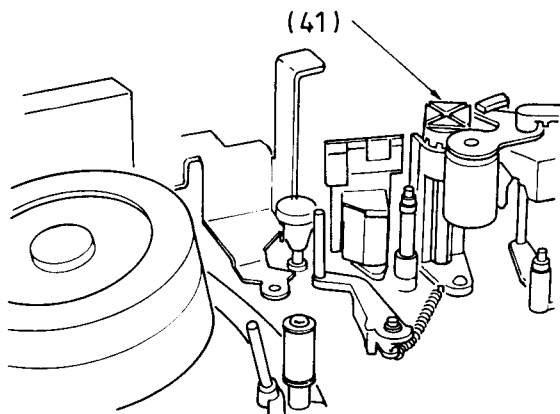


Fig. 23

## 6.5 Adjusting the Capstan Rotor (133)

**Service Aids:** Dial Height Gauge, Height Gauge

- Loosen the adjustment screw (41), Fig. 23, until the capstan stator (135) just touches the rotor (133).
- Place the Height Gauge "U" onto the capstan rotor (133) and the Dial Height Gauge as shown in Fig. 24 onto the smooth area on the edge of the mechanics. Set the pointer of the Dial Height Gauge to zero.
- With the adjustment screw (41) adjust the distance between the capstan rotor (133) and the stator (135) to 0.5mm...0.55mm (Fig. 25).

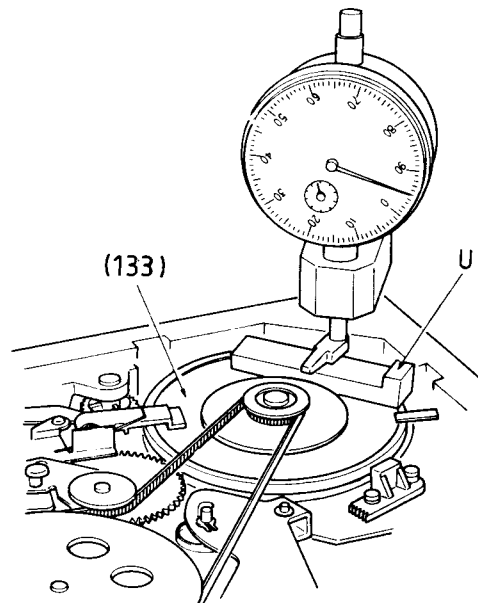


Fig. 24

## 6.6 Höheneinstellung der Wickelteller

**Meßmittel:** Einstellplatte, Höhenmeßuhr

- Cassettenschacht ausbauen (Kap. 3).
- Einstellplatte auf die Wickelteller legen.
- Höhenmeßuhr so auf die Einstellplatte legen, daß deren Meßfuß im ausgearbeiteten Teil der Einstellplatte aufsitzt (Fig. 26).
- Skala der Höhenmeßuhr auf Null stellen
- Höhe der Wickelteller (14), (71) messen (Fig. 27).
- Wenn der gemessene Wert mehr als  $\pm 0,2\text{mm}$  vom eingestellten Nullwert der Skala abweicht, Wickeltellerhöhe durch Austauschen der Unterlegscheiben einstellen. Folgende Unterlegscheiben sind lieferbar:

Unterlegscheibe / Washer / Rondella	Sachnummer / Part Number / No. ordine
0,2 mm	75 986 - 208.21
0,3 mm	75 986 - 208.22
0,5 mm	75 986 - 208.23

## 6.6 Height Adjustment of the Spool Carriers

**Service Aid:** Post Adjustment Plate, Dial Height Gauge

- Remove the cassette compartment (para 3)
- Place the Post Adjustment Plate onto the spool carrier.
- Place the Dial Height Gauge onto the Post Adjustment Plate so that the measuring probe of the Dial Height Gauge locates into the cut-out provided on the Post Adjustment Plate (Fig. 26).
- Set the pointer of the Dial Height Gauge to zero.
- Measure the height of the spool carrier (14), (71) (Fig. 27).
- If the measured value differs from the zero Value of the pointer by more than  $\pm 0.2\text{mm}$ , readjust the spool carrier height by replacing the shim washer. The following shim washers are available:

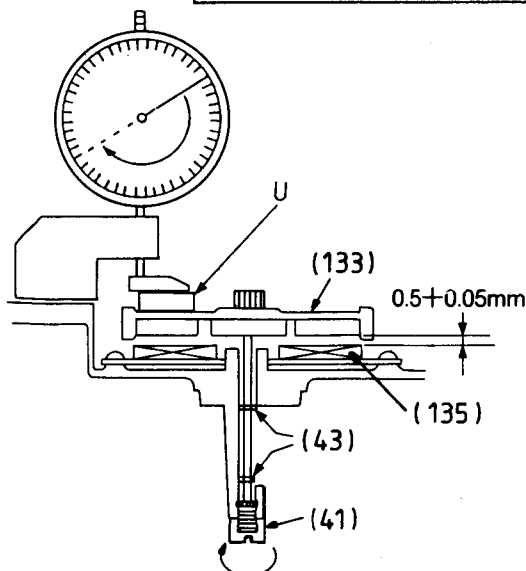


Fig. 25

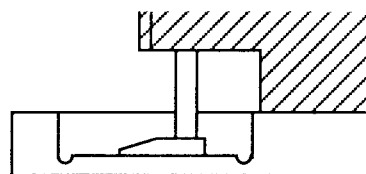


Fig. 26

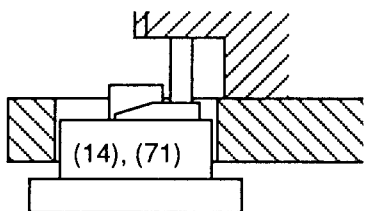


Fig. 27

## 6.7 Statische Höheneinstellung der Bandbolzen P2, P3 und P5

**Meßmittel:** Einstellplatte, Höhenmeßuhr, Einstellschraubendreher

### Vorbereitung:

- Cassettenschacht ausbauen (Kap. 3)
- Einstellplatte nach Abbildungen Fig. 28 / 31 auf die Wickelteller legen.

### 6.7.1 Bandführungsbolzen P2, P3

- Höhe der Bandführungsbolzen P2 / P3 so einstellen, daß der untere Führungsbund unter der Oberkante der Einstellplatte liegt (Fig. 29).
- Höhenmeßuhr nach Abbildung Fig. 29 platzieren und Anzeige auf Null stellen. Anschließend Bandführungsbolzen soweit hochdrehen, bis der untere Führungsbund gerade den Meßfühler der Höhenmeßuhr berührt (Fig. 30).
- Schraube "V" nicht lösen! Sie dient zur Neigungseinstellung der Führungsbolzen P2, P3.
- Statische Höheneinstellung kontrollieren (Kap. 6.7.3).

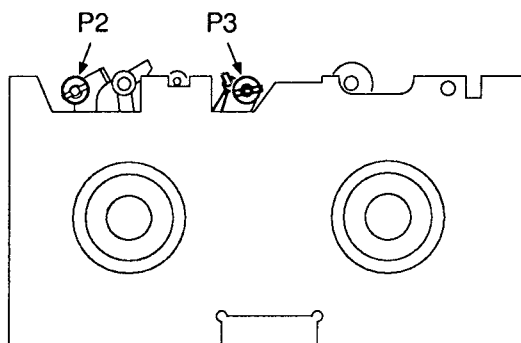


Fig. 28

## 6.7 Static Height Adjustment of Tape Bolts P2, P3 and P5

**Service Aids:** Post Adjustment Plate, Dial Height Gauge, Post Adjustment screw driver

### Preparations:

- Remove the cassette compartment (para 3)
- Place the Post Adjustment Plate onto the spool carrier as shown in Fig. 28 / 31.

### 6.7.1 Tape Guide Bolts P2, P3

- Adjust the height of the Tape Guide Bolts P2, P3 so that the lower guide collar lies below the upper edge of the Post Adjustment Plate (Fig. 29).
- Place the Dial Height Gauge as shown in Fig. 29 and set the pointer to zero. Afterwards adjust to raise the height of the Tape Guide Bolts so that the lower guide collar just touches the measuring probe of the Dial Height Gauge (Fig. 30).
- Do not loosen screw "V"! This screw is only for adjusting the tilt of the Guide Bolts P2, P3.
- Check the Static Height Adjustment (para 6.7.3).

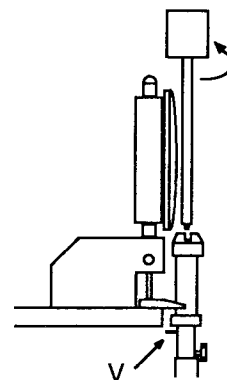


Fig. 29

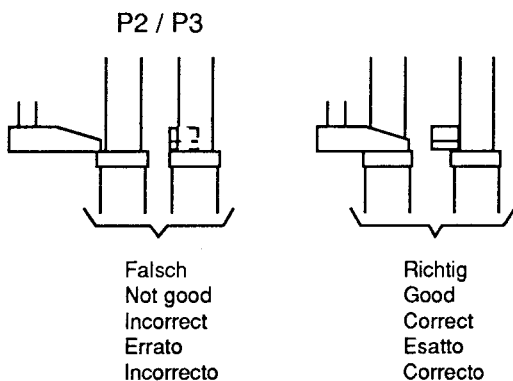


Fig. 30

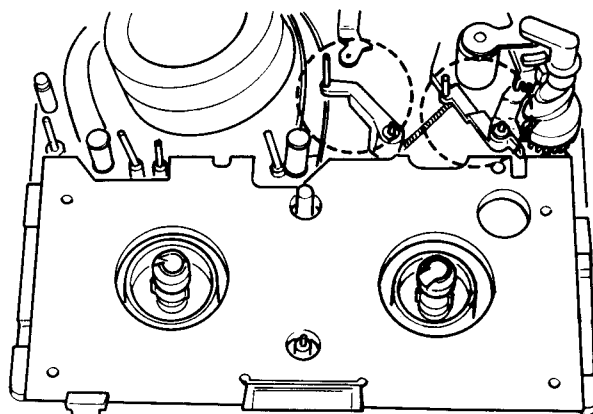


Fig. 31

### 6.7.2 Bandauszugsbolzen P5

**Hinweis:** Einstellmutter (52) des Bandauszugsbolzens P5 nur zu Justagezwecken verdrehen!

- Capstanrotor soweit entgegen dem Uhrzeigersinn drehen, bis die in Abbildung Fig. 31 gezeigte Laufwerkstellung erreicht ist.
- Höhenmeßuhr nach Abbildung Fig. 32 auf die Einstellplatte stellen und Skala auf "Null" eichen.
- Höhenmeßuhr nach Abbildung Fig. 33 am unteren Führungsbund des Bandauszugsbolzens P5 auflegen und mit der Einstellmutter (52) die Anzeige der Höhenmeßuhr auf  $0,03 \text{ mm} \pm 0,01 \text{ mm}$  einstellen.
- Statische Höheneinstellung kontrollieren (Kap. 6.7.3).

### 6.7.2 Tape Pull-Out Bolt P5

**Note:** The Adjustment Nut (52) on the Tape Pull-out Bolt P5 must be turned for adjustment purposes only!

- Rotate the capstan rotor in the anti-clockwise direction until the mechanics reaches the position shown in Fig. 31.
- Place the Dial Height Gauge onto the Post Adjustment Plate as shown in Fig. 32 and adjust the pointer to zero.
- Place the Dial Height Gauge as shown in Fig. 33 onto the lower guide collar of the Tape Pull-out Bolt P5 and adjust the nut (52) until the pointer of the Dial Height Gauge indicates  $0.03 \text{ mm} \pm 0.01 \text{ mm}$ .
- Check the Static Height Adjustment (para 6.7.3).

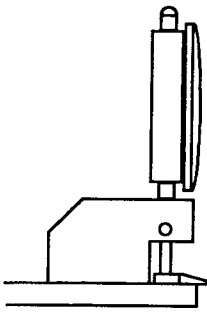


Fig. 32

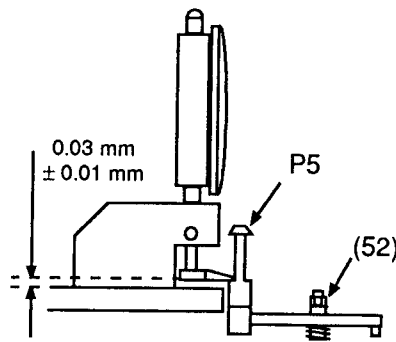


Fig. 33

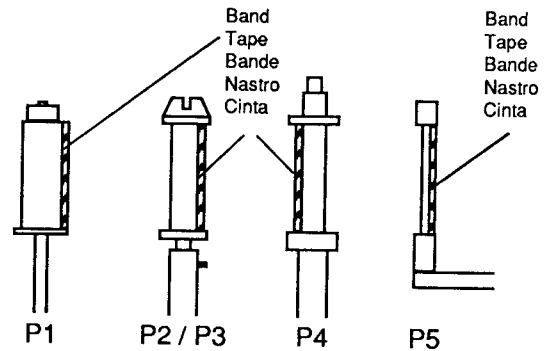


Fig. 34

### 6.7.3 Kontrolle der statischen Höheneinstellung

- Cassettenschacht einbauen (Kap. 4).
- A / W - Cassette wiedergeben.
- Prüfen, ob das Band an den Bolzen P1, P2, P3, P4 und P5 ohne zu bürdeln läuft (Fig. 34... Fig. 36).
- Gegebenenfalls Höhenjustage Kap. 6.7.1 und 6.7.2 wiederholen.
- Dynamische Einstellung der Bandführungsbolzen P2, P3 prüfen (Kap. 6.8.1)

### 6.7.3 Checking the Static Height Adjustment

- Refit the cassette compartment (para 4).
- Playback a record / playback cassette.
- Check that the tape runs past the Bolts P1, P2, P3, P4 and P5 without crinkling (Fig. 34 ... Fig. 36).
- If necessary, repeat the height adjustment as described in paras 6.7.1 and 6.7.2.
- Check the Dynamic Adjustment of the Tape Guide Bolts P2, P3 (para 6.8.1).

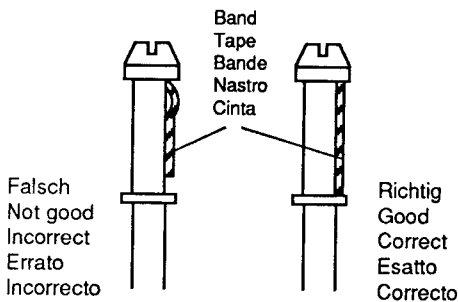


Fig. 35

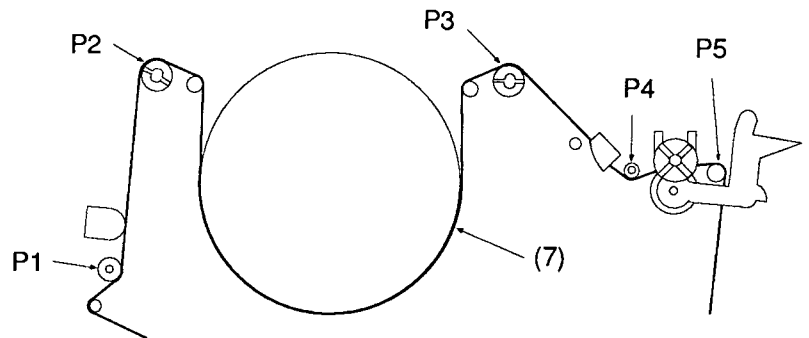


Fig. 36

### 6.8 Bandlaufeinstellung / Kompatibilitäts-einstellung

Diese Einstellungen sind grundsätzlich nach Tausch des Audio-/ Synchronkopfes (A/C), der Andruckrolle oder nach Justage der Bolzen P2, P3, P5 durchzuführen bzw. zu überprüfen. Dabei muß folgende Reihenfolge eingehalten werden:

- 6.8.1 Dyn. Einstellung der Bolzen P2, P3
- 6.8.2 Einstellen der Neigung des A/C -Kopfes
- 6.8.3 Höheneinstellung des A/C-Kopfes
- 6.8.4 Azimut-Einstellung des A/C-Kopfes
- 6.8.5 Einstellen der horizontalen Lage des A/C-Kopfes

### 6.8 Tape Transport Adjustment / Compatibility Adjustment

These adjustments must be carried out or checked in every case after every replacement of the A/C head, the Pressure Roller or after adjusting the Bolts P2, P3, P5. The following sequence must be adhered to:

- 6.8.1 Dynamic adjustment of the Bolts P2, P3
- 6.8.2 Tilt adjustment of the A/C Head
- 6.8.3 Height adjustment of the A/C Head
- 6.8.4 Azimuth adjustment of the A/C Head
- 6.8.5 Horizontal position adjustment of the A/C Head

#### 6.8.1 Dynamische Einstellung der Bolzen P2, P3

**Meßmittel:** Testcassette, Oszilloskop

- Oszilloskop nach Abbildung Fig. 37 anschließen:  
Tastkopf 1 an TP 1  
Tastkopf 2 an TP 2
- Testcassette wiedergeben (Tracking in Mittelstellung)
- Falls sich Hüllkurven wie die Beispiele "A" und "B" in Abbildung Fig. 38 zeigen, Hüllkurve mit dem Einlauf-Bandführungsbolzen P2 nach Abbildung Fig. 38 - "E" einstellen.
- Falls sich Hüllkurven wie die Beispiele "C" oder "D" in Abbildung Fig. 38 zeigen, Hüllkurve mit Auslauf-Bandführungsbolzen P3 nach Abbildung Fig. 38 - "E" einstellen.
- Trackingeinstellung nach "+" und "-" variieren. Dabei sollen die Hüllkurvenränder parallel zusammenlaufen (Fig. 39).
- Tracking auf maximale Hüllkurvenamplitude einstellen. Diese muß folgende Grenzwerte einhalten (Fig. 40):  
 $V1 / V \geq 0,7$ ;  $V2 / V \geq 0,8$
- Gegebenenfalls Einstellung wiederholen.

#### 6.8.1 Dynamic adjustment of the Bolts P2, P3

**Service Aids:** Test Cassette, Oscilloscope

- Connect the oscilloscope as shown in Fig. 37:  
Test Probe 1 to TP 1  
Test Probe 2 to TP 2
- Playback the test cassette (tracking to mid setting).
- If the FM envelopes are displayed as shown in examples "A" and "B" in Fig. 38 adjust with the Run-in Tape Guide Bolt P2 so that the FM envelopes are as shown in Fig. 38 - "E".
- If the FM envelopes are displayed as shown in example "C" or "D" in Fig. 38, adjust with the Run-out Tape Guide Bolt P3 so that the FM envelopes are as shown in Fig. 38 - "E".
- Vary the Tracking in the "+" and "-" directions. When doing so the FM envelope should show parallel converging lines (Fig. 39).
- Adjust the tracking to obtain maximum FM envelope amplitude. This must produce the following basic values (Fig. 40):  
 $V1 / V \geq 0.7$ ;  $V2 / V \geq 0.8$
- If not obtained repeat these adjustments.



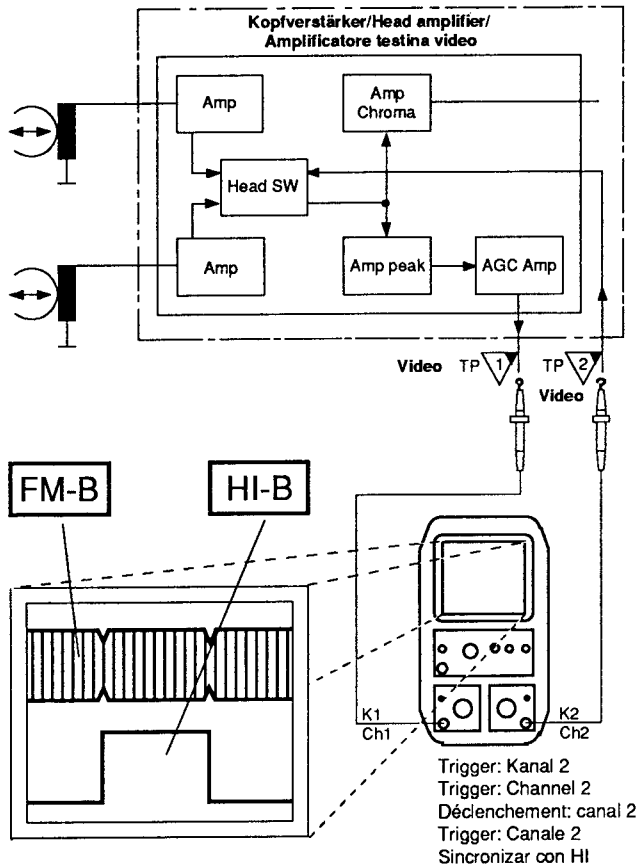


Fig. 37

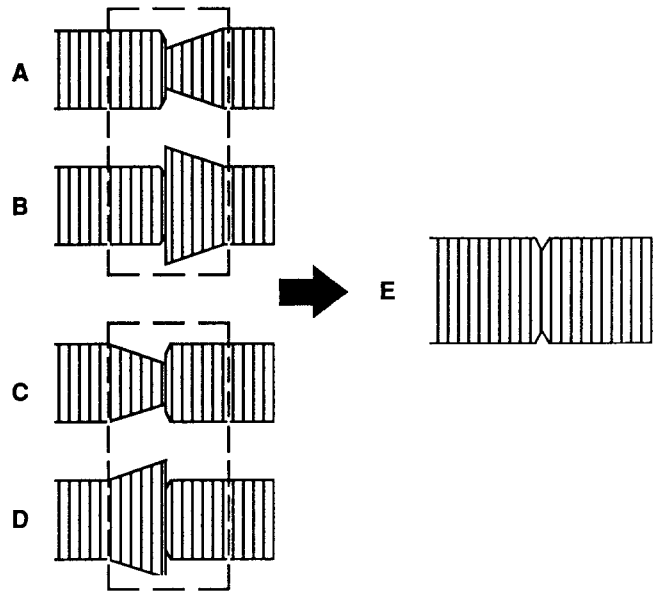


Fig. 38

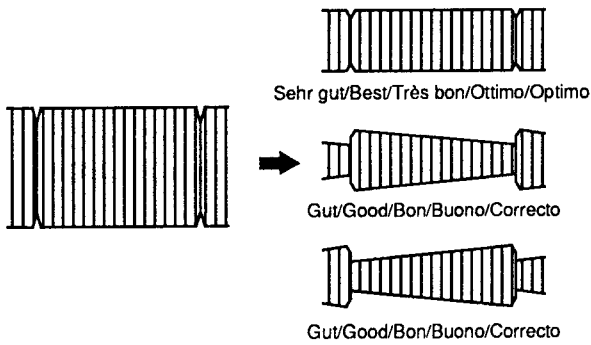


Fig. 39

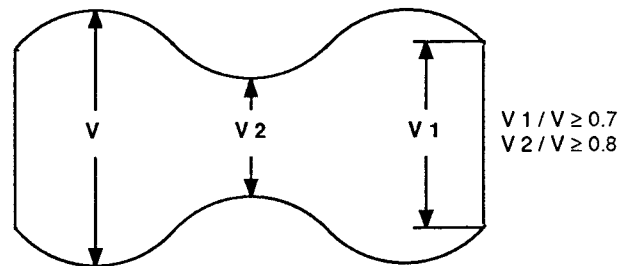


Fig. 40

### 6.8.2 Einstellen der Neigung des A/C-Kopfes

- Unbespielte Cassette vom Bandanfang an wiedergeben.
- Neigung des A/C-Kopfes (34) mit Schraube "A1" (Fig. 41 / 42) so einstellen, daß das Band bei manueller Bandzugerhöhung leicht sichtbar, jedoch ohne zu bördeln am unteren Führungsbund des Bandlaufbolzens P4 aufliegt.
- Höheneinstellung des A/C-Kopfes prüfen (Kap. 6.8.3)

### 6.8.2 Tilt Adjustment of the A/C Head

- Playback an un-used cassette from the beginning.
- Adjust the tilt of the A/C head (34) with the screw "A1" (Fig. 41 / 42) so that the tape, whilst manually increasing the tape tension, just touches the lower collar of the Tape Guide Bolt P4 without crinkling.
- Check the height adjustment of the A/C Head (para 6.8.3)

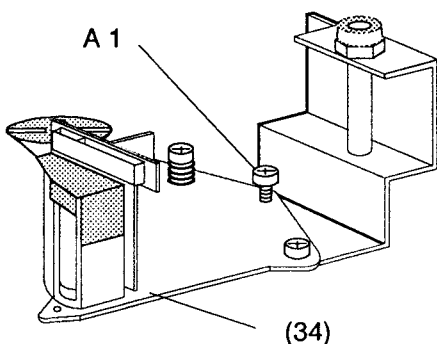


Fig. 41

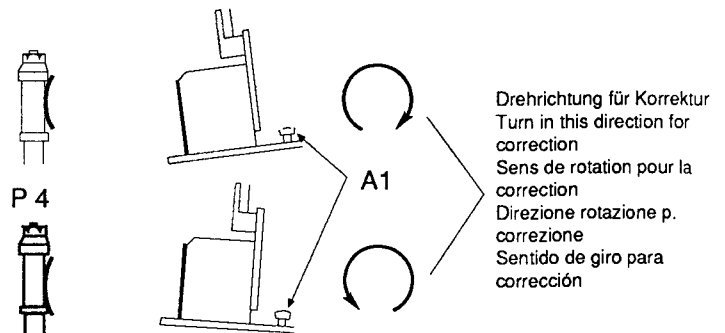


Fig. 42

### 6.8.3 Höheneinstellung des A/C-Kopfes

**Meßmittel:** Testcassette, Oszilloskop

- Testcassette wiedergeben
- mit Mutter (35) den unteren Rand des Synchronkopfes mit dem unteren Rand des Bandes zur Deckung bringen (Fig. 43).

**Kontrolle:**

- Tastkopf des Oszilloskops an EURO-AV-Buchse, Kontakt 1
- 6,3 kHz- Signal der Testcassette wiedergeben
- mit Mutter (35) maximale Ausgangsspannung einstellen (Fig. 44).

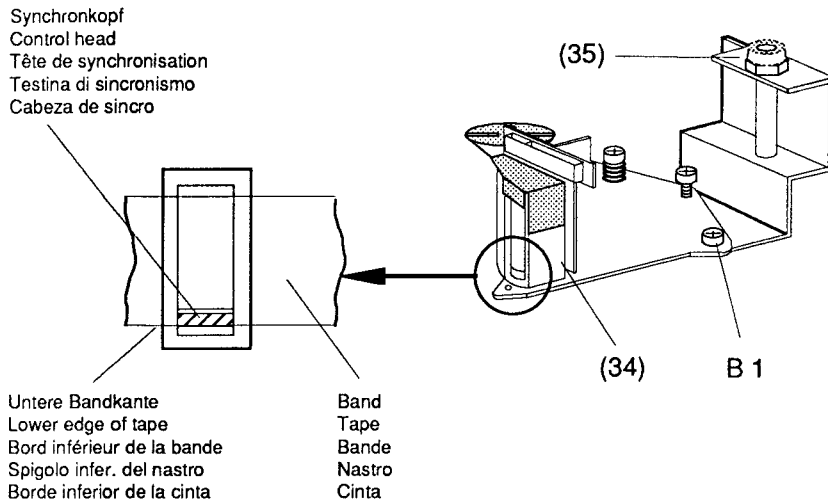


Fig. 43

### 6.8.3 Height adjustment of the A/C Head

**Service Aids:** Test Cassette, Oscilloscope

- Playback the Test Cassette.
- Turn the nut (35) so that the bottom edge of the Sync Head coincides with the lower edge of the tape (Fig. 43).

**CHECK:**

- Connect a test probe from the Oscilloscope to contact 1 of the EURO-AV Socket.
- Playback the 6.3 kHz signal from the Test Cassette.
- Adjust the nut (35) to obtain maximum output voltage (Fig. 44).

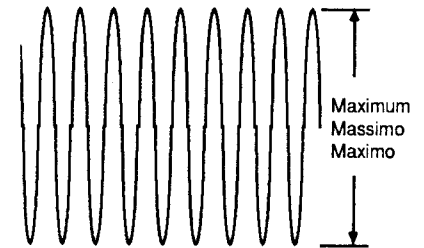


Fig. 44

### 6.8.4 Azimuteinstellung des A/C-Kopfes

**Meßmittel:** Testcassette, Oszilloskop

- Tastkopf des Oszilloskops an EURO-AV-Buchse, Kontakt 1.
- 6,3 kHz-Audiosignal der Testcassette wiedergeben.
- mit Schraube "B1" maximalen Ausgangspegel einstellen (Fig. 43, Fig. 44).

### 6.8.4 Azimuth adjustment of the A/C Head

**Service Aids:** Test Cassette, Oscilloscope

- Connect a test probe from the Oscilloscope to contact 1 of the EURO-AV Socket.
- Playback the 6.3 kHz signal from the Test Cassette.
- Adjust the screw "B1" to obtain maximum output voltage (Fig. 43, Fig. 44).

### 6.8.5 Einstellen der horizontalen Lage des A/C-Kopfes

**Meßmittel:** Testcassette, Oszilloskop

- Oszilloskop nach Abbildung Fig. 37 anschließen
- Testcassette wiedergeben (Tracking in Mittelstellung)
- Hüllkurve (FM vom Band) mit Mutter (36) auf maximale Amplitude einstellen (Fig. 45, Fig. 46).

### 6.8.5 Horizontal position adjustment of the A/C Head

**Service Aids:** Test Cassette, Oscilloscope

- Connect the Oscilloscope as shown in Fig. 37.
- Playback the Test Cassette (tracking to mid setting).
- Set the envelopes (FM Tape) to maximum amplitude (Fig. 45, Fig. 46) with the nut (36).

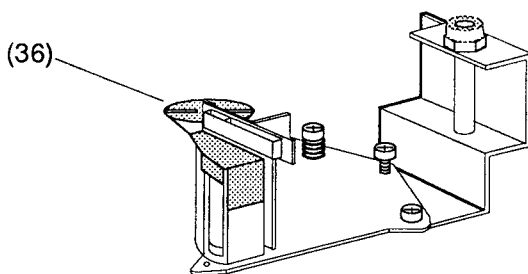


Fig. 45

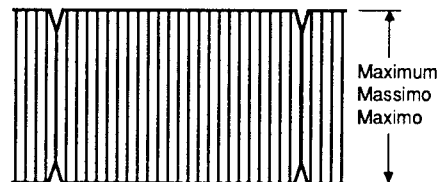


Fig. 46

## 7. Hinweise zu Reparaturen in der Antriebsmechanik

Dieses Laufwerk ist durch den Funktionswahlschalter (55) sehr eng mit der Ablaufsteuerung verknüpft. Die Beziehung zwischen Funktionswahlschalter und den Kurvenrädern bestimmt alle weiteren mechanischen Funktionsabläufe. Falls Hebel, Zahnräder, Rollen usw. nicht exakt eingebaut sind, können deshalb Laufwerksblockaden, bzw. Schäden im Laufwerk oder in der Elektronik auftreten.

Die Abbildungen Fig. 47 / 48 zeigen das Laufwerk in der Bezugsposition "STOP" und die dabei auftretende Anordnung der Markierungslöcher. Die Bezugsposition "STOP" ist identisch mit der Laufwerkstellung "Umspülbetrieb". Diese entspricht der 2. Raststellung des Kupplungsrades (116), wenn diese Laufwerkstellung durch Drehen des Capstanrotors von Hand angefahren wird.

Der Austausch von Bauteilen in der Antriebsmechanik darf nur in dieser Laufwerkstellung erfolgen.

## 7. Notes on Repairing the Drive Mechanism

This Drive Mechanism is very closely coupled with the Sequence Control by means of the Mode Select Switch (56). The relationship between the Mode Select Switch and the Cam Gears determines all the sequences of the other mechanical operations. If, therefore, the levers, gears and rollers etc. are not correctly fitted, the drive mechanism may fail to work and damage may occur within the mechanics or electronic circuits.

The illustrations Fig. 47 / 48 show the drive mechanism in the reference position "STOP" and the resulting alignment of the marking holes. The reference position "STOP" is identical to the mechanical position during "WINDING MODE". This corresponds to the second locking position of the clutch disc (116), when this mechanical position is reached by rotating the capstan rotor by hand.

Replacement of components in the drive mechanism must only be carried out with the mechanics set to this position.

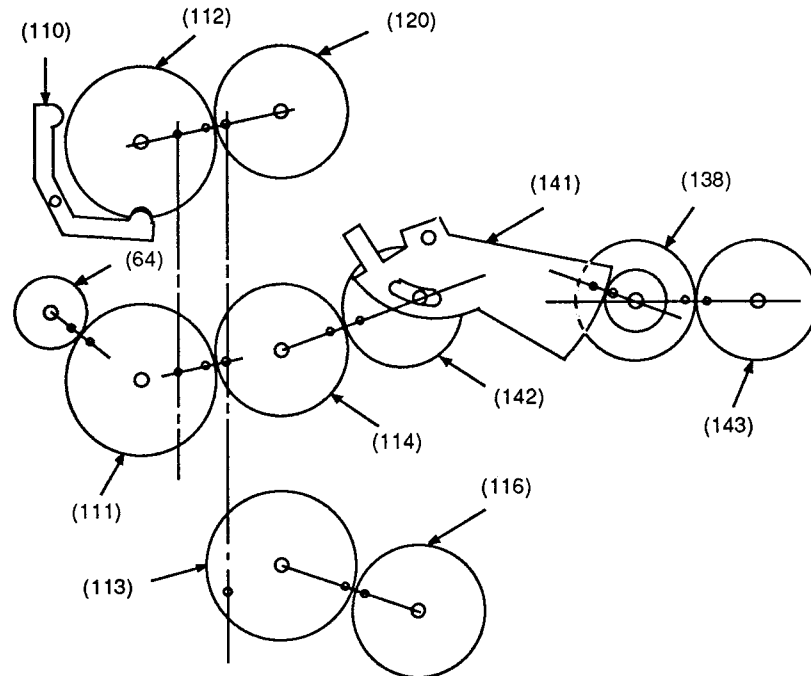


Fig. 47

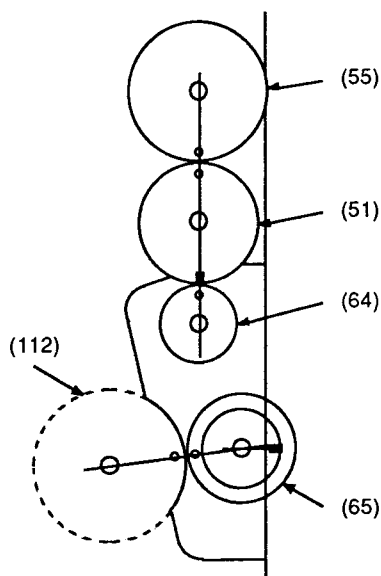


Fig. 48

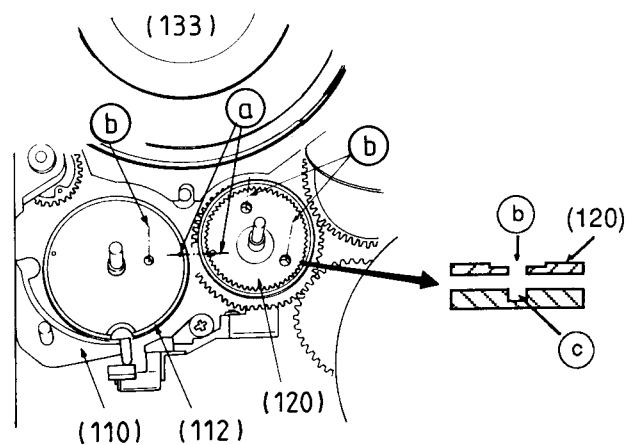


Fig. 49

## 7.1 Kurvenrad (112), Ringrad (120), Sperrhebel (110)

- Ringrad (120) so einbauen, daß die Markierungslöcher (b) im Ringrad mit den Markierungslöchern (c) im Laufwerkchassis übereinstimmen (Fig. 49).
- Kurvenrad (112) so einbauen, daß das Markierungsloch (b) mit dem Markierungsloch (c) im Laufwerk übereinstimmt und das Markierungsloch (a) dem Markierungsloch (a) des Ringrades (120) gegenübersteht.
- Sperrhebel (110) einsetzen.

## 7.2 Kurvenrad (111), Untersetzungszahnrad (64)

- Untersetzungszahnrad (64) von der Oberseite des Laufwerks einsetzen (Fig. 50).
- Kurvenrad (111) so auf das Kurvenrad (112) stecken, daß sich die Markierungslöcher (a) des Kurvenrades (111) und des Untersetzungszahnrads (64) gegenüberstehen. Gleichzeitig müssen die Markierungslöcher (b) der Kurvenräder (111) und (112) genau übereinander liegen (Fig. 49 / 50).

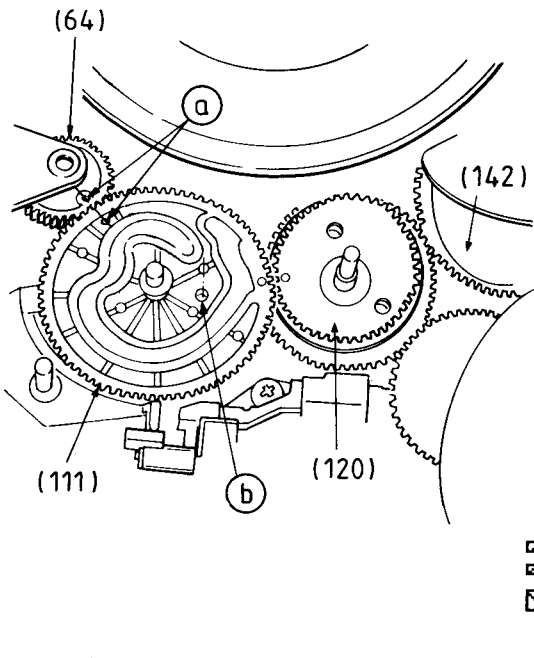


Fig. 50

## 7.1 Sub Cam Gear (112), Ring Gear (120), Locking Lever (110)

- Fit the ring gear (120) so that the marked holes (b) in the Ring Gear lines up with the marked holes (c) in the mechanical chassis (Fig. 49).
- Fit the Sub Cam Gear (112) so that the marked hole (b) lines up with the marked hole (c) in the mechanics and that the marked hole (a) faces towards the marked hole (a) on the Ring Gear (120).
- Fit the Locking Lever (110).

## 7.2 Cam Gear (111), Reduction Toothed Gear (64)

- Fit the Reduction Toothed Gear (64) from the top of the mechanics (Fig. 50)
- Fit the Cam Gear (111) onto the Sub Cam Gear (112) so that the marked holes (a) on the Cam Gear (110) and the Reduction Gear (64) are aligned towards each other. In this position the marked holes (b) on the Cam Gears (111) and (112) must lie accurately over each other (Fig. 49 / 50).

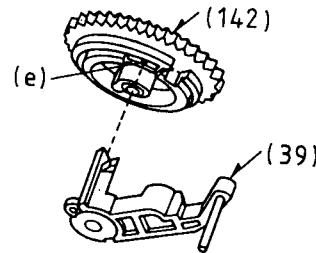


Fig. 51

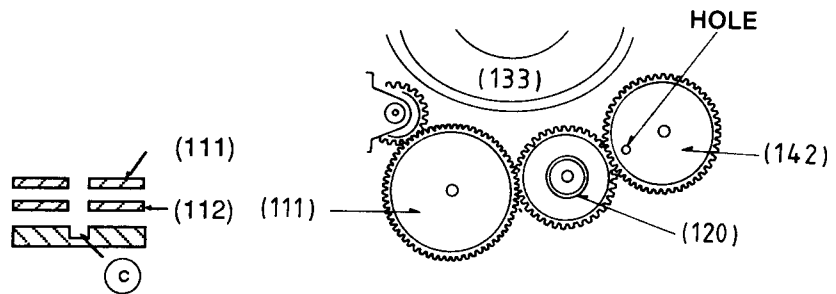


Fig. 51-1

## 7.3 Ladekurvenrad (142), Zwischenrad (114)

- Ladekurvenrad (142) so einbauen, daß der Hilfsladehebel (39) in die Aussparung "e" eingreift (Fig. 51).
- Zwischenrad (114) auf das Ringrad (120) stecken (Fig. 52). Die Markierungslöcher des Zwischenrades (114) und des Kurvenrades (111), sowie die Markierungslöcher (b) des Zwischenrades (114) und des Ladekurvenrades (142) müssen gegenüberstehen. Gleichzeitig müssen das Markierungsloch (b) des Zwischenrades (114), das Markierungsloch (b) des Ringrades (120) und das Markierungsloch (c) im Laufwerkchassis übereinanderliegen.

## 7.4 Steuerrad (113)

- Steuerrad (113) so auf das Zwischenrad (114) stecken, daß das Markierungsloch (a) des Steuerrades (113) dem Markierungsloch (a) des Kupplungsrades (116) gegenübersteht und die Markierungslöcher (b) des Steuerrades (113), (b) des Zwischenrades (114), (b) des Ringrades (120) und (c) des Laufwerks übereinanderliegen (Fig. 53).
- Sicherungsring (100) montieren.

## 7.5 Hauptsteuerschieber (103), Steuerhebel (109)

- Hauptsteuerschieber (103) einsetzen und mit den Sicherungsringen (100) befestigen (Fig. 54).
- Steuerhebel (109) so einbauen, daß dessen Steuerbolzen "f" in die Steuerkurve des Kurvenrades (111) und der Abbug in die Aussparung des Hauptsteuerschiebers (103) eingreift (Fig. 55).
- Greifring "X" montieren.

## 7.3 Loading Cam Gear (142), Intermediate Gear (114)

- Fit the Loading Cam Gear (142) so that the Sub Loading Lever (39) engages with the cut out "e" (Fig. 51).
- Fit the Intermediate gear (114) onto the Ring Gear (120), (Fig. 52). The marked holes (a) on the Intermediate Gear (114) and the Cam Gear (111) and the marked the holes (b) on the Intermediate Gear (114) and the Loading Cam Gear (142) must be aligned towards each other. Simultaneously the marked hole (b) on the Intermediate Gear (114), the marked hole (b) on the Ring Gear (120) and the marked hole (c) on the mechanical chassis must lie accurately over each other.

## 7.4 Drive Gear (113)

- Fit the Drive Gear (113) onto the Intermediate Gear (114) so that the marked hole (a) on the Drive Gear (113) is aligned towards the marked hole (a) on the Clutch Disk (116), and the marked holes (b) on the Drive Gear (113), marked hole (b) on the Intermediate Gear (114), marked hole (b) on the Ring Gear (120) and the marked hole (c) on the mechanics lie accurately over each other (Fig. 53).
- Fit the Securing Ring (100).

## 7.5 Main Control Lever (103), Control Lever (109)

- Fit the Main Control Lever (103) and secure with the securing ring (100) (Fig. 54)
- Fit the Control Lever (109) so that the Drive Bolt "f" engages with the cam curve of the Cam Gear (111) and the bent part with the gap in the main control lever (103), Fig. 55.
- Fit the Grip Ring "X".

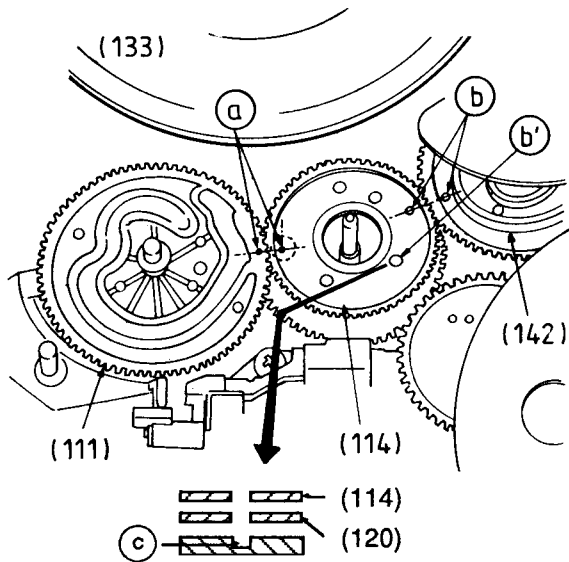


Fig. 52

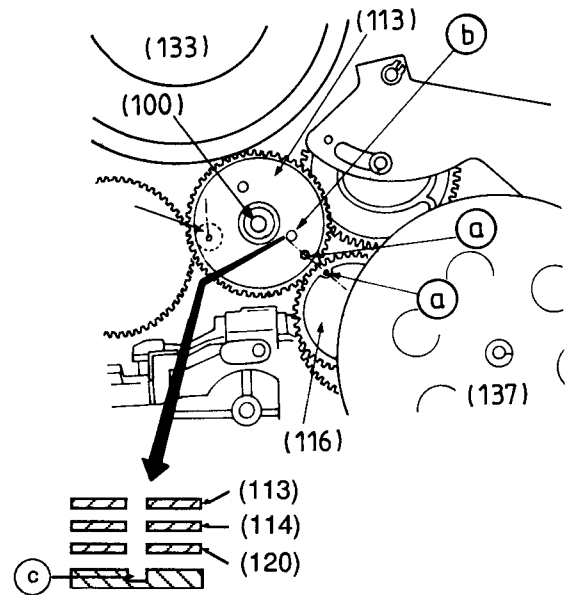


Fig. 53

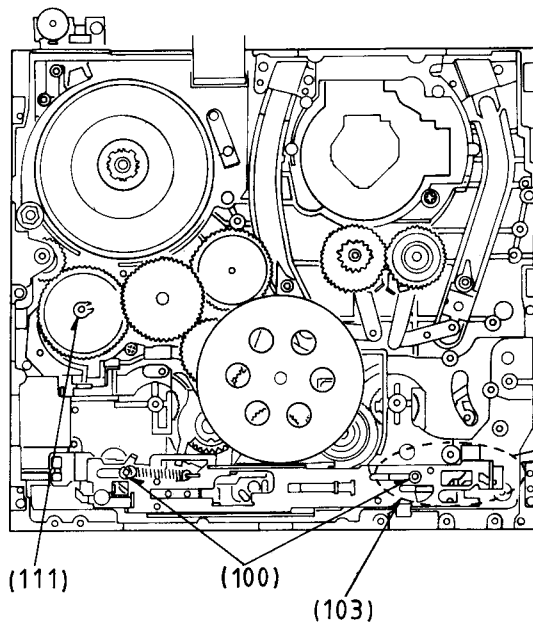


Fig. 54

### 7.6 Laderäder (138,143), Zahnsegment (141), Bremshebel (105), Spannrollenhebel (108)

- Bandführungsbolzen P2, P3 in Stellung "STOP" bringen.
- Laderäder (138, 143) so einsetzen, daß sich deren Markierungslöcher (b) gegenüberstehen (Fig. 56).
- Zahnsegment (141) nach Fig. 56 einbauen. Das Markierungsloch (b) des Zahnsegments (141) muß sich gegenüber der Markierungsnase (d) des Laderades (138) befinden.
- Bremshebel (105) und Greifring "X" montieren.
- Spannrollenhebel (108) einbauen.
- Spannung des Riemens des Capstanmotors einstellen (Kap. 6.1)
- Schrauben "SC" anziehen.

### 7.6 Loading Gears (138,143), Toothed Segment (141), Brake Lever (105), Tension Roller Lever (108)

- Set the Tape Guide Bolts P2 and P3 into the "STOP" position.
- Fit the Loading Gears (138, 143) so that their marked holes (b) are aligned towards each other (Fig. 56).
- Fit the Toothed Segment (141) as shown in Fig. 56. The marked hole (b) on the Toothed Segment (141) must be aligned towards the marked lug (d) on the Loading Gear (138).
- Fit the Brake Lever (105) and the Grip Ring "X".
- Fit the Tension Roller Lever (108).
- Adjust the tension of the belt of the capstan motor (para 6.1).
- Tighten the screws "SC".

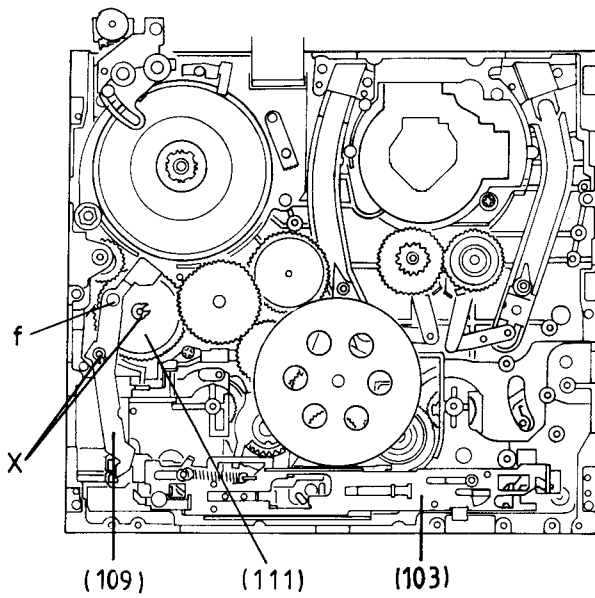


Fig. 55

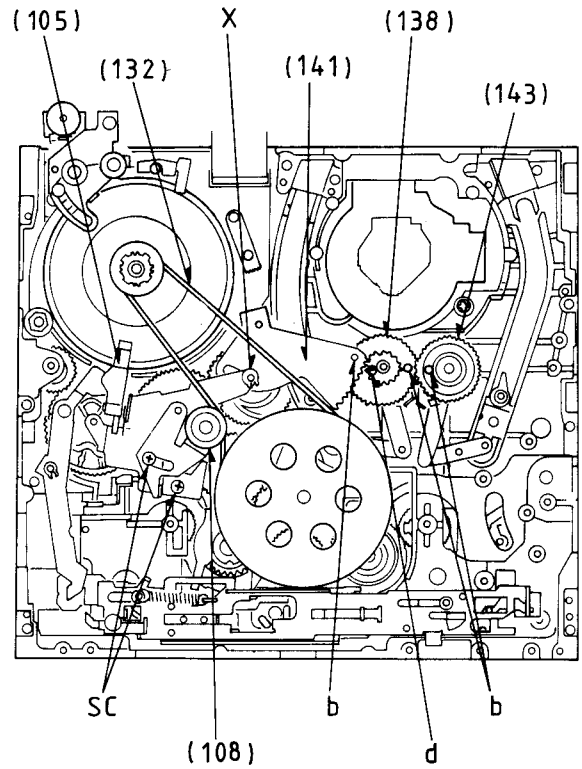


Fig. 56

**7.7 Umspulhebel (153), Umspulkupplung (151),  
Zugverminderungshebel (154),  
Zugverminderungs-Kupplung (152)**

- Umspulhebel (153) und Umspulkupplung (151) montieren (Fig. 57).
- Umspulriemen (159) auf die Umspulkupplung (151) legen.
- Zugverminderungshebel (154) und Zugverminderungs-Kupplung (152) einbauen.

**7.7 Rev Arm Unit (153), Rev Clutch Unit (151),  
Tension Release Lever (154),  
Tension Release Clutch Unit (152)**

- Fit the Rev Arm Unit (153) and the Rev Clutch Unit (151), Fig. 57.
- Put the Rev Motor Timing Belt (159) onto the Rev Clutch Unit (151).
- Fit the Tension Release Lever (154) and Tension Release Clutch Unit (152).

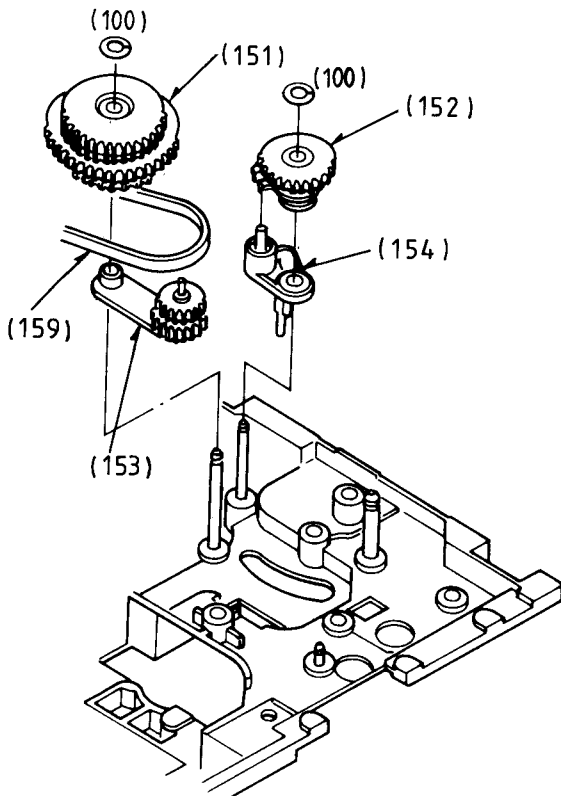


Fig. 57

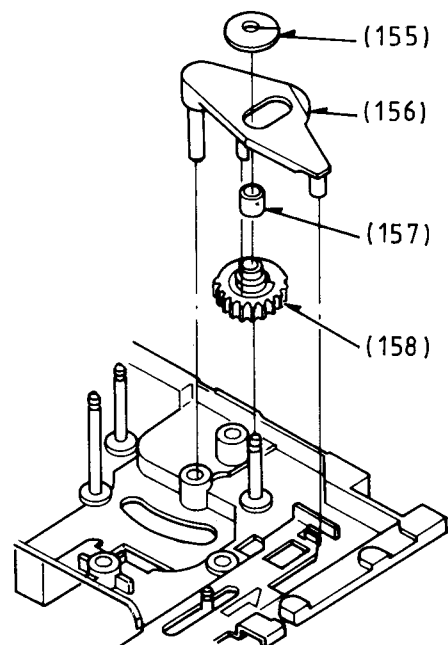


Fig. 58

### 7.8 Hilfshebelrad (158), Hilfshebel (156), Umspulkontrollhebel (160)

- Hilfshebelrad (158), Hilfshebel (156), Bremsring (157) und Scheibe (155) gemäß Fig. 58 montieren.
- Umspulkontrollhebel (160) gemäß Fig. 59 einbauen.

### 7.9 Riemenspannhebel (93)

- Riemenspannhebel (93) gemäß Fig. 60 montieren.
- Riemenspannung, wie in Kapitel 6.2 beschrieben, einstellen.

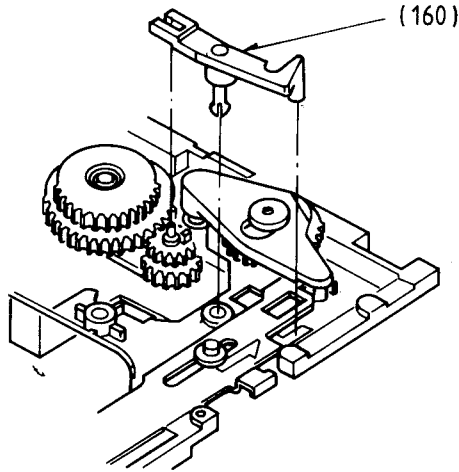


Fig. 59

### 7.8 Sub Lever Cam (158), Sub Cam Follower (156), Review Control Lever (160)

- Fit the Sub Lever Cam (158), the Sub Cam Follower (156), the Rubber Stopper (157) and the Washer (155) as shown in Fig. 58.
- Fit the Review Control Lever (160) as shown in Fig. 59.

### 7.9 Tension Pulley Base Unit (93)

- Fit the Tension Pulley Base Unit (93) as shown in Fig. 60.
- Adjust the tension of the Timing Belt as described under point 6.2.

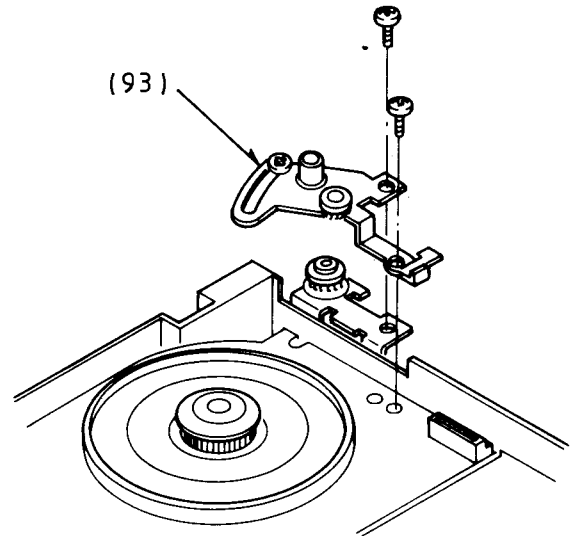


Fig. 60

### 7.10 Zwischenrad (65)

**Hinweis:** Bevor Sie das Zwischenrad einbauen, müssen sich alle Zahnräder in den bisher beschriebenen Positionen befinden.

- Zwischenrad (65) gemäß Abbildung Fig. 61 einsetzen. Die Markierungsblöcher **a** des Zwischenrades (65) und des Kurvenrades (112) müssen sich gegenüberstehen.

### 7.10 Intermediate Gear (65)

**Note:** Before fitting the Intermediate Gear make sure that all other gears are in the positions described earlier.

- Fit the Intermediate Gear (65) as shown in Fig. 61. The marked holes **a** on the Intermediate Gear (65) and the Cam gear (112) must be aligned towards each other.

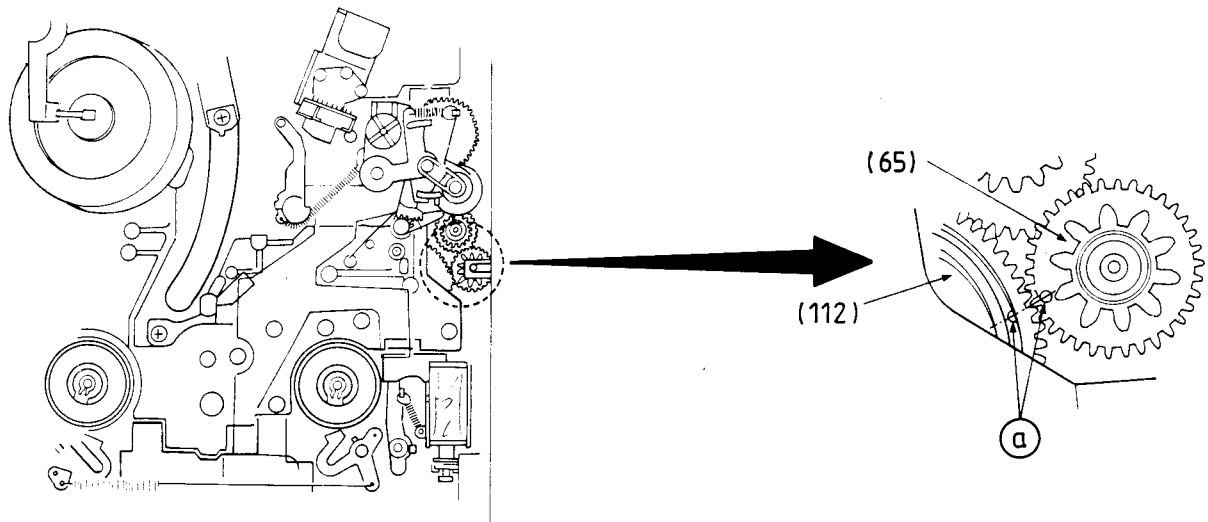


Fig. 61

## 7.11 Funktionswahlschalter (55), P5-Zahnsegment (50)

- Funktionswahlschalter (55) einsetzen, Schraube "g" eindrehen und Kontakte "h" anlöten (Fig. 62).
- P5-Zahnsegment (50) nach Abbildung Fig. 62 einsetzen. Das Markierungsloch (a) des P5-Zahnsegments (50) muß dem 1. Zahn des Zahnsegments des P5-Hebels (53) gegenüberstehen.

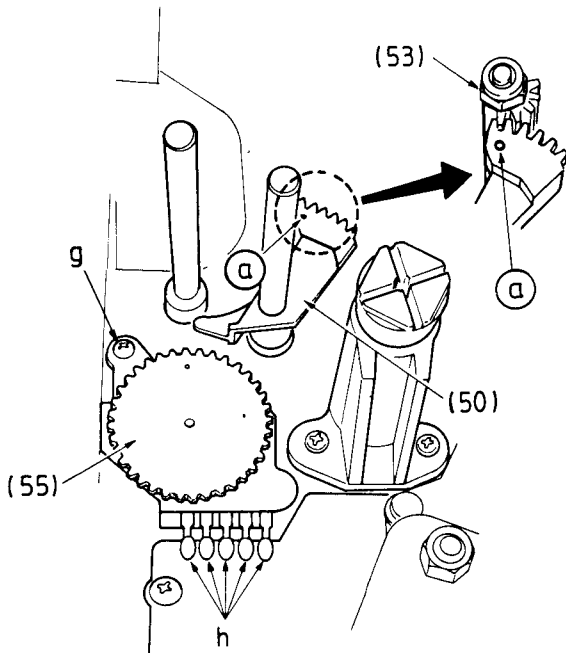


Fig. 62

## 7.11 Mode Select Switch (55), P5 Toothed Segment (50)

- Fit the mode select switch (55), tighten the screw "g" and solder the contacts "h" (Fig. 62).
- Fit the P5 Toothed Segment (50) as shown in Fig. 62. The marked hole (a) on the P5 Toothed Segment (50) must be aligned towards the first tooth of the Tooth Segment on the P5 Lever (53).

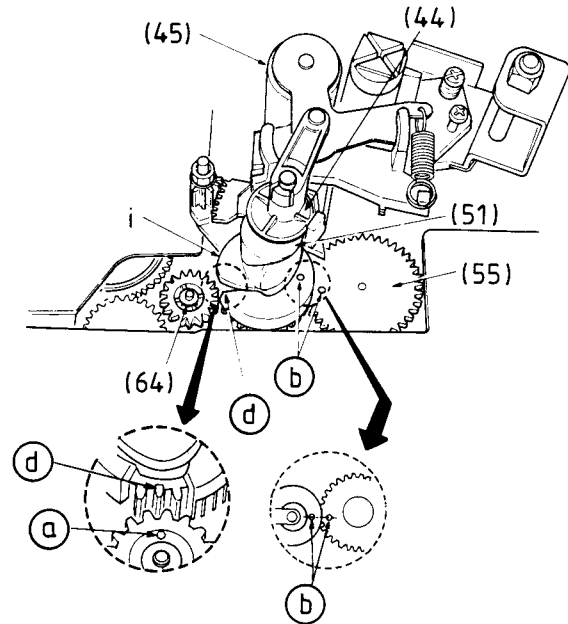


Fig. 63

## 7.12 Rollenhebelantrieb (51), Andruckrolleneinheit (45)

- Rollenhebelantrieb (51) so einsetzen, daß die Ecke "i" des P5-Hebels (53) in der Aussparung des Rollenhebelantriebs liegt (Fig. 63). Die Markierungsnase (d) am Zahnrad des Rollenhebelantriebs und das Markierungsloch (a) des Untersetzungs Zahnrads (64) müssen gegenüberstehen. Außerdem müssen die Markierungs-löcher (b) des Funktionswahlschalters (55) und des Zahnrades des Rollenhebelantriebs (51) gegenüberstehen.
- Andruckrolleneinheit (45) und Sicherungskappe (44) einbauen.

## 7.12 Roller Lever Drive (51), Pressure Roller Assembly (45)

- Fit the Roller Lever Drive (51), so that the corner "i" of the P5 Lever (53) lies in the cut out on the Roller Lever Drive (Fig. 63). The marked nose (d) on the toothed gear of the Roller Lever Drive and the marked hole (a) on the Reduction Toothed Gear (64) must be aligned towards each other. In addition, the marked holes (b) on the Mode Select Switch (55) and on the tooth gear of the Roller Lever Drive (51) must be aligned towards each other.
- Fit the Pressure Roller Assembly (45) and the Securing Cap (44).

## 8. Allgemeine Hinweise

- Die in Klammern angegebenen Zahlen sind mit den Positionsnummern in den Explosionszeichnungen und Ersatzteillisten identisch.
- Justagemarkierungen:

- (a) kleine Markierungslöcher
- (b) große Markierungslöcher
- (c) Bezugsmarkierung im Laufwerk
- (d) Markierungsnasen

### Testcassette Sach-Nr. 9.27540 - 1011

- Farbtestbild mit Dropout-Einblendung
- 6,3 kHz- Senkrecht-Vollspuraufzeichnung und Bezugspegel 333 Hz in dreiminütigem Wechsel.

### Testcassette (HiFi) Sach-Nr. 9.27540 - 1016

- Farbtestbild mit Dropout-Einblendung
- Längsspur - Ton: 6,3 kHz / 333 Hz
- FM-Ton: 1 kHz Vollpegel (± 50 kHz Hub)

### Ersatzteilliste

Die Ersatzteilliste für das Laufwerk ist im Service Manual des betreffenden Videorecorders enthalten!

## 8. General Notes

- The numbers quoted in brackets are the same as the position numbers given in the Exploded Diagrams and Spare Parts Lists.
- Alignment marks:

- (a) Small marked holes
- (b) Large marked holes
- (c) Reference mark in the mechanics
- (d) Marked lugs

### Test cassette Part no. 9.27540 - 1011

- Colour test pattern with dropout recording
- 6.3 kHz vertical full-track recording alternating with 333 Hz reference level every 3 minutes.

### Test cassette (HiFi) Part no. 9.27540 - 1016

- Colour test pattern with dropout recording
- Longitudinal track sound: 6.3 kHz / 333 Hz
- FM sound: 1 kHz full level (± 50 kHz deviation)

### Spare parts list

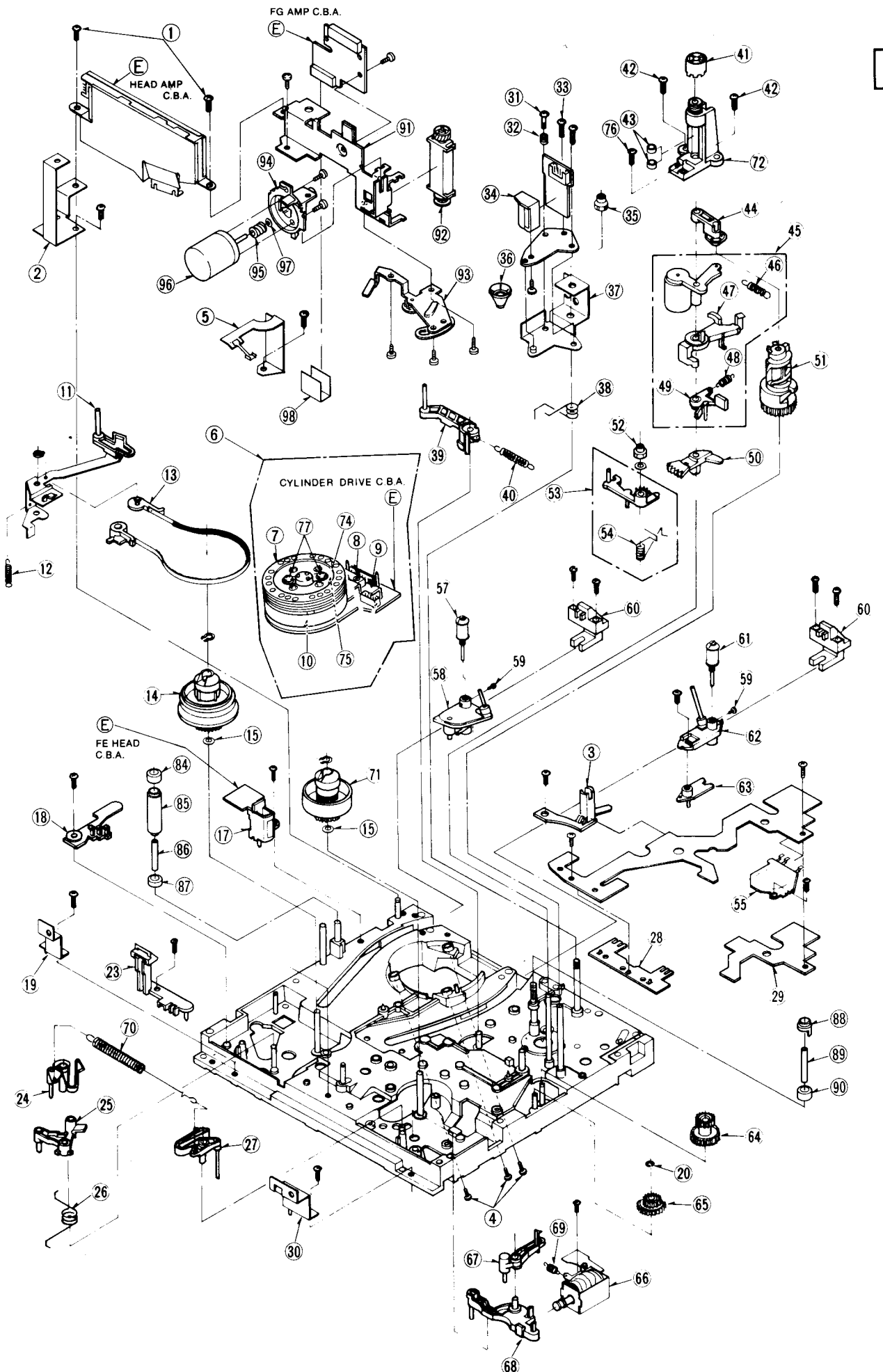
The Service Manual of the video recorder referred to contains the spare parts list of the drive mechanism!



# Explosionszeichnungen

# Exploded views

1



2

