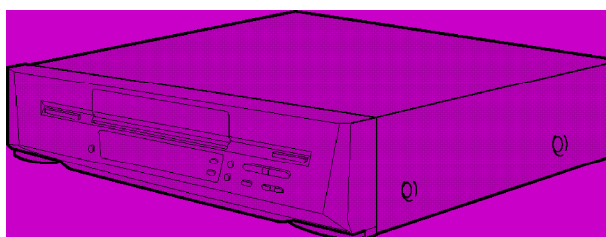


Service Manual

Video Cassette Recorder

Panasonic **VHS** **Hi-Fi**
PAL

**NV-FJ620EG / NV-FJ620EGY / NV-FJ620B / NV-FJ620BL /
NV-FJ620EC / NV-FJ620ECM / NV-FJ620ECN / NV-FJ620ECY**
Z-MECHANISM



SPECIFICATIONS

SPECIFICATIONS

ITEM	SPECIFICATION		ITEM	SPECIFICATION
POWER	SOURCE: 220-240 V AC 50/60 Hz		AUDIO	HEAD: 1 Stationary head (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
	CONSUMPTION: 21 watts COMSUMPTION WHEN IN STANDBY MODE: Approx. 3W (NV-FJ620EG/EGY/EC/ECM/ECN/ECY)			INPUT: EURO AV (AV1, AV2) Connector (21 pin) More than -6dBV (500 mV), 10 k Ω
RECORDING SYSTEM	2 rotary heads, helical scanning system PAL			OUTPUT: AUDIO OUT Connector (Phono type) -6 dBV (500mV), Less than 1k Ω EURO AV (AV1, AV2) Connector (21 pin) -6 dBV (500mV), Less than 1k Ω
TV TUNER SYSTEM	NV-FJ620EG/EGY/EC/ECM/ECN/ECY	VHF: CHE2-CHE12 CHA-CHH2 [ITALY] (PAL/SECAM B) UHF: CH21-CH69 (PAL/SECAM G) CATV: CHS01-CHS41 (PAL/SECAM B)	TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s EP: 7.796 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape EP: 12 hours with 240min type tape FF/REW Time: 60 sec. with 180 min. type tape
	NV-FJ620B	UHF: CH21-CH68 (PAL I)		
	NV-FJ620BL	VHF: CHA-CHJ (PAL I) UHF: CH21-CH69 (PAL I) CATV: 104-470MHz (PAL I)		
RF OUT SYSTEM	NV-FJ620EG/EGY/EC/ECM/ECN/ECY	UHF: CH21-CH69 (PAL/SECAM G) 71 $\pm$ 3 dB μ , 75 Ω close	OPERATING TEMPERATURE	5°C - 40°C
	NV-FJ620B/BL	UHF: CH21-CH68 (PAL I) 71 $\pm$ 3 dB μ , 75 Ω close	OPERATING HUMIDITY	35% - 80%
VIDEO	HEADS:	4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L'-R' heads)	DIMENSIONS	430 (W) -87(H) -282(D) mm
	INPUT:	EURO AV (AV1, AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω terminated	WEIGHT	3.3 kg
	OUTPUT:	EURO AV (AV1, AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω terminated	STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-res Remote Controller

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

© 2001 Matsushita Electric Industrial Co., Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

1. INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service this model.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note:

1. Adjustment procedures, Disassembly Procedures and Assembly Procedures for Mechanism Chassis are separate volume from this service manual. / Please refer to the service manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)
2. The Model No. is indicated on the Schematic Diagram and Circuit Board Diagrams as follows.

Model No.	Indication Mark
NV-FJ620EG	(A)
NV-FJ620EGY	(B)
NV-FJ620B	(C)
NV-FJ620BL	(D)
NV-FJ620EC/ECM/ECN	(E)
NV-FJ620ECY	(F)

2. GENERAL DESCRIPTIONS

2.1. SERVICE CAUTION

2.1.1. REPLACING IC7702/EEPROM

When the EEPROM: IC7702 is replaced, applicable model code, option code and electrical adjustment data will not be available.

Therefore, enter and/or adjust the necessary data after replacing IC7702 by referring following procedure.

STEP1.REPLACE THE IC7702

1. Remove the C.B.A. with Mechanism unit by referring the Disassembly procedure.
2. Disconnect the AC plug and replace the IC7702.

STEP2.INPUT THE MODEL & OPTION CODE

1. Set up the applicable model code and option code by ordering the following table.

PROCEDURE	F.I.P. DISPLAY
Turn on the Service Mode 1.Press the FF key and the EJECT key simultaneously for more than 3 seconds.	
Activate the Service Mode 2 2.While keep placing FF key, press the EJECT key in twice.	
Activate the Entering Mode. 3.Press the EJECT key for more than 3 seconds.	
Set the Mode 2. 4.Press the CH UP key in twice.	
Display the Setting Code. 5.Press the POWER Button to turn the power on.	 (Colon starts flashing)
Enter the Model and Option Code. 6.Set the applicable Model and Option code by using REW, PLAY, STOP and FF keys on the Remote Controller. (See Fig.S1 & S2)	
Exit from Service Mode. 7.Press the POWER Button to turn the power off. 8. Press FF and EJECT keys simultaneously in 6 times.	 (Normal Indication)

Fig.S1 Service Secreen (sample)

Panasonic VCR		
Service		
MAIN	VXGD0.19	1
Time ref. pos.	NONE	
Last error code	00	
Model Code	1	(01h)
Option Code 1	125	(7Dh)
Option Code 2	196	(C4h)
Option Code 3	65	(41h)
Clock adjust	-	1
VPS/PDC default	OFF	(depend)

Model No.	Model Code	Option Code 1	Option Code 2	Option Code 3
NV-FJ620EG / EGY	81 / (51h)	8 / (08h)	212 / (D4h)	6 / (06h)
NV-FJ620EC / ECM/ECN/ECY	82 / (52h)	8 / (08h)	212 / (D4h)	6 / (06h)
NV-FJ620B	83 / (53h)	40 / (28h)	212 / (D4h)	5 / (05h)
NV-FJ620BL	84 / (54h)	40 / (28h)	212 / (D4h)	5 / (05h)

Fig. S2 Model Code & Option Code

NOTE:

Since all electrical adjustments data is still not available, perform the Electrical Adjustment continuously.

2.1.2. CYLINDER UNIT REPLACEMENT

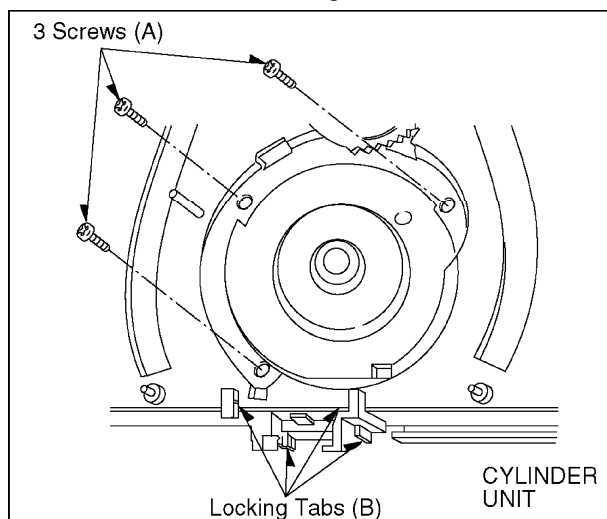
1. CYLINDER UNIT REPLACEMENT

- Remove the mechanism unit from MAIN C.B.A./Chassis by referring "SECTION 2. Disassembly Procedure".
- Remove the 3 screws (A) of the CYLINDER UNIT with a screw driver.
- Unlock the 4 locking tabs (B) and disconnect the Cylinder flexible card from the FPC Holder.
- Remove the CYLINDER UNIT.

CAUTION:

Handle the Cylinder flexible card with care. When it damaged, you should replace whole Cylinder unit.

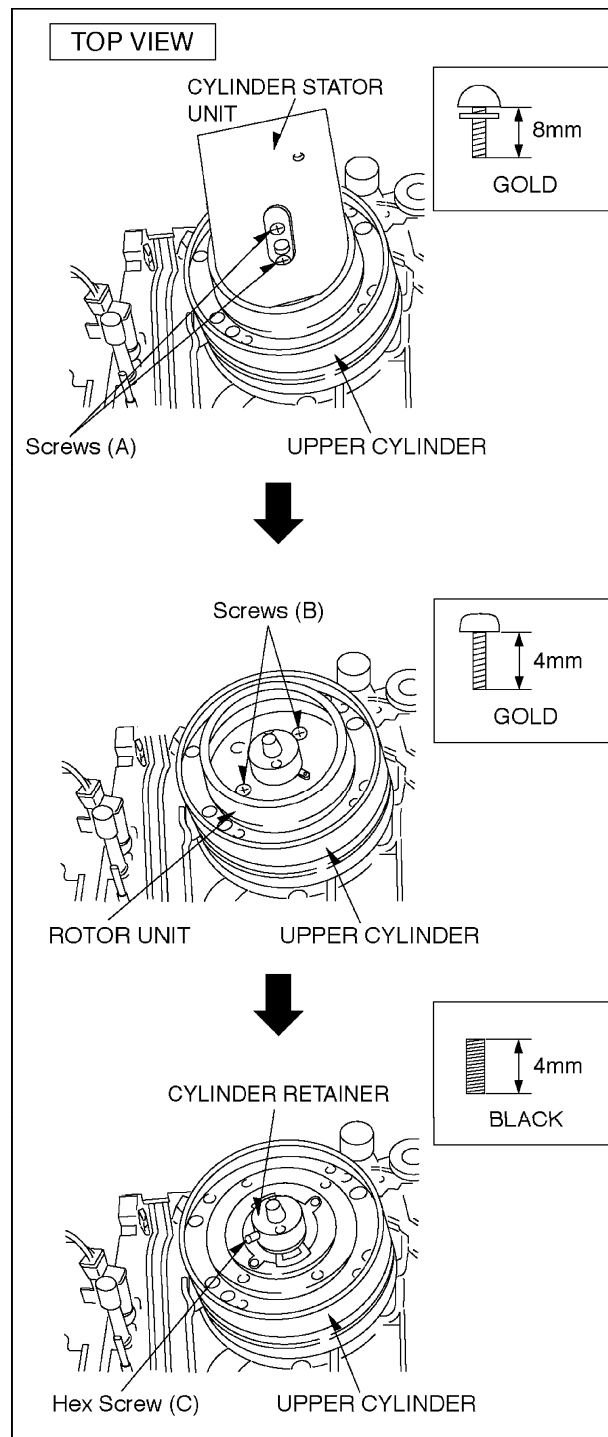
Fig. S3



2. UPPER CYLINDER DISASSEMBLY

- Remove 2 screws (A).
- Remove the Cylinder Stator Unit.
- Remove 2 screws (B).
- Remove the Cylinder Rotor Unit.
- Loose Hex screw (C) (1.5 mm) and remove the CYLINDER RETAINER.
- Remove the Upper Cylinder.

Fig. S4



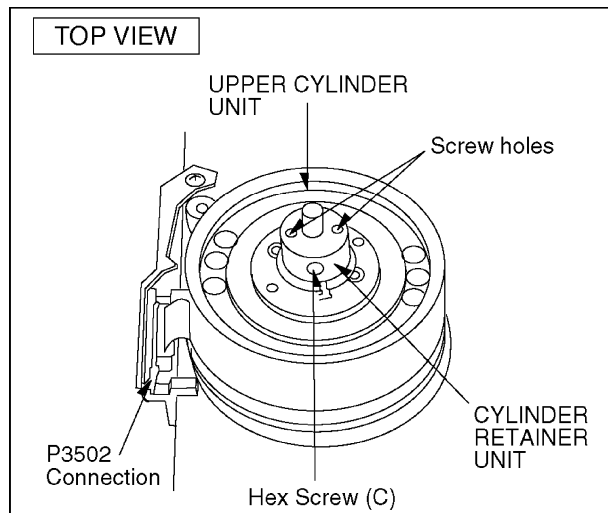
3. UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order.

Notes:

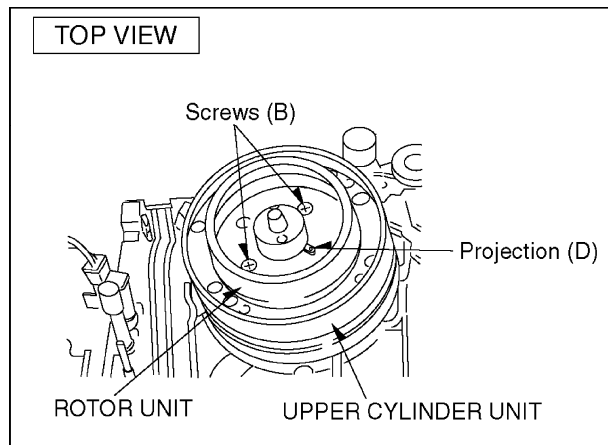
1. Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the P3502 Connection.
2. Tighten the Hex screw (C) (1.5 mm) while pressing down on top of the Cylinder Retainer.

Fig. S5



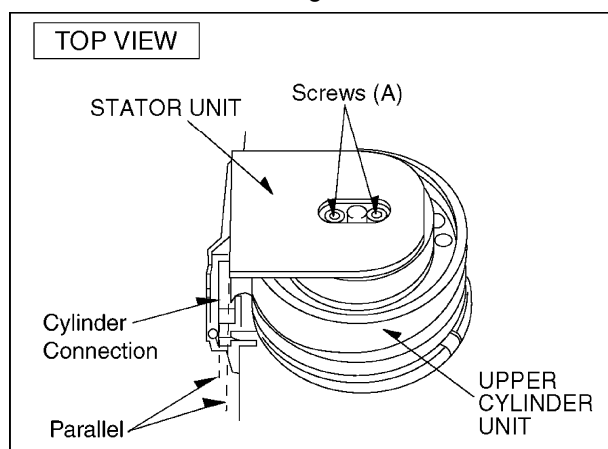
3. Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.
4. Tighten 2 screws (B).

Fig. S6



5. install the Cylinder Stator Unit.
6. Tighten 2 screws (A).

Fig. S7

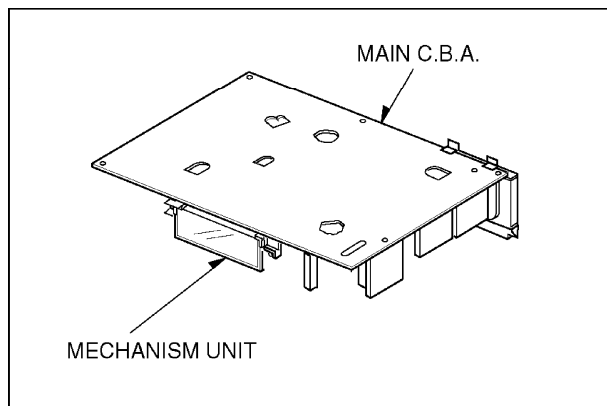


7. Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL: VFJ8125H3F) and adjust it if necessary.

2.1.3. CHECKING OF MAIN C.B.A.

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

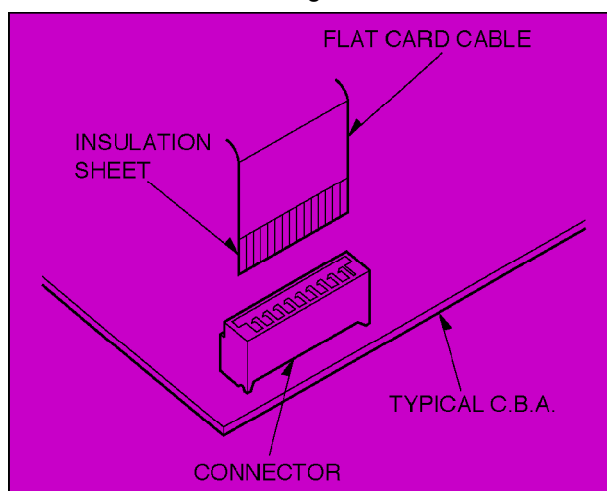
Fig. S8



2.1.4. FLAT CARD CABLE INSTALLATION

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

Fig. S9



2.2. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

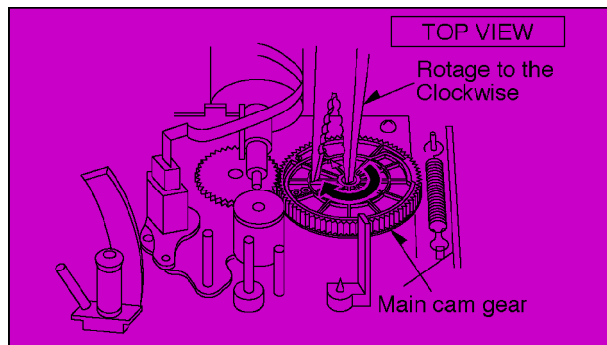
1. Service Information Display Operation

- A. Press the FF and EJECT keys simultaneously for 3 seconds and set the Service Mode 7.
- B. Press STOP key in order to rotate the Loading Motor for unloading operation. (Pay an attention of tape slack)

2. Manual Operation

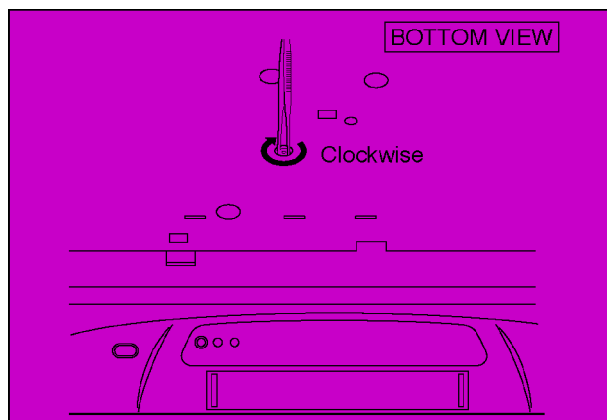
- A. Disconnect the AC Mains Lead and remove the Top Panel.
- B. Rotate the Main Cam Gear clockwise until the Loading Posts move to fully unloaded position as shown in [Fig. S10](#).
(Tape is remaining)

Fig. S10



C. Rotate the Capstan Motor clockwise from the bottom side to take up the tape.

Fig. S11



D. Rotate the Main Cam Gear clockwise until the cassette tape is ejected.

2.3. INTRODUCTION OF VIDEO HEAD CLEANING CASSETTE / (POLISHING TYPE)

1. We are pleased to introduce Panasonic Video Head Cleaning Cassette, **VFK0923FT** [for service purposes] and **VFK0923FSE** [for end users] for all VHS/SVHS VCP and VCR.
2. These cleaning cassettes are exclusive removing the hard and sticky clogging on video heads.
3. These improve the efficiency of video head cleaning service and shortening cleaning time for end users.

VFK0923FT (For Service usage)	
Type of Cassette	Full VHS Cassette
Cleaning Time	10 Seconds/Time
Tape Length	20 m
Usability in a Path	180 Times
	

VFK0823FSE (For end users)	
Type of Cassette	Full VHS Cassette
Cleaning Time	10 Seconds/Time
Tape Length	3.34 m
Usability in a Path	30 Times
	

Note:

The tape material itself is the same in both types.

2.4. SELF-DIAGNOSIS RESULT DISPLAY

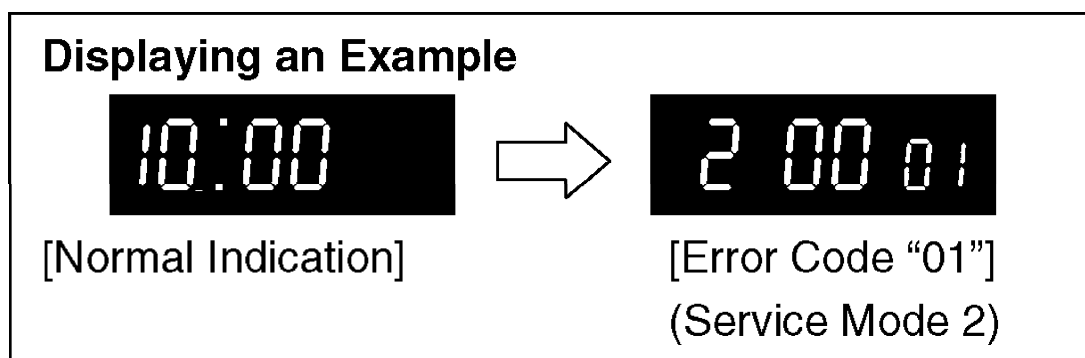
The "SELF-DIAGNOSIS RESULT DISPLAY & MEMORY" function is built in this VTR.

It means that when the VCR detects undesirable condition, it can be displayed a "Error code (Two numbers from the left)" with Service Mode 2.

Since the "Error code" is stored in the EEPROM, it can be displayed although after disconnected the AC leads. It can be displayed with Service Mode 2.

(If a second error had been detected, only the most recent error is displayed.)

For more details, refer to the Service Manual for Z-Mechanism Chassis Order number VRD9612M129.



INDICATION	CAUSE	REMEDY/CHECK
01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder motor drive circuit.
02	Cassette tape is not wound up during the tape unloading except EJECT mode.	Check the capstan motor drive circuit.
03	Mechanism locks during mode transition except EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the mode switch.
04	Mechanism locks during tape unloading.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment.
06	Mechanism locks after tape unloading in EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment for cassette holder un
07	During recording mode, recording signal is less than the normal condition.	Protection of the over-current flowing in transi which produces the power supply for recording mode.
08	Recording circuit works except recording mode.	Check the recording circuit.
16	Cylinder lock detection.	Check the cylinder unit and the cylinder motor drive circuit.
17	Supply reel mechanism lock detection	Check the supply reel mechanism and the sup reel circuit.
18	Take-up reel mechanism lock detection	Check the Take-up reel mechanism and the Take-up reel circuit.
2*	PG shifter automatic adjustment error.	Check the servo/system control circuit and the cylinder unit.

Fig. T1 Self-Test indication Display

2.5. CAUTION FOR AC MAINS LEAD (NV-FJ620B/BL)

3. ADJUSTMENT PROCEDURES

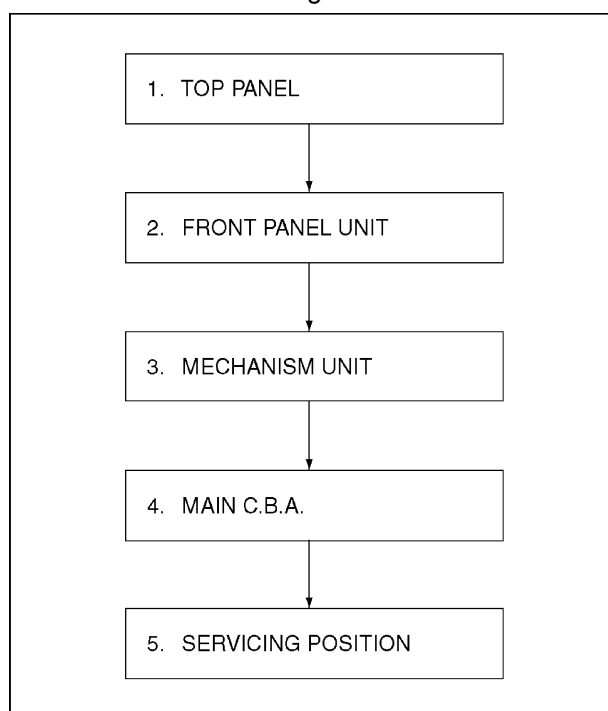
3.1. DISASSEMBLY METHOD

3.1.1. 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 reassembling, perform the steps in the reverse order.

Fig. D1

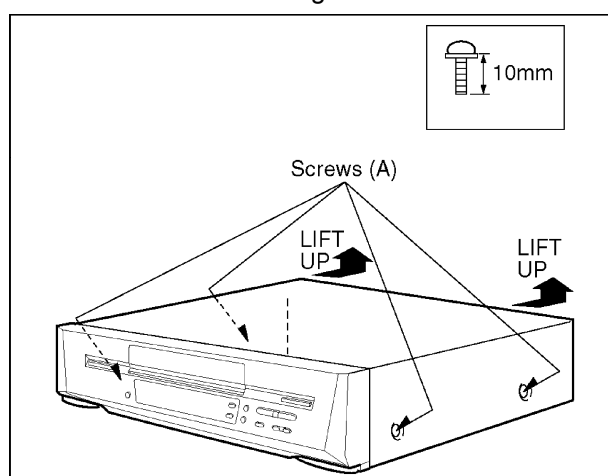


3.1.2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove	4 Screws (A)
--------	--------------

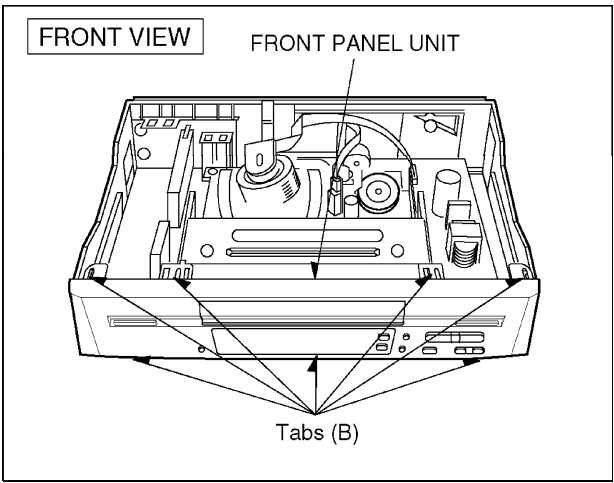
Fig.D2



2. REMOVAL OF THE FRONT PANEL UNIT

Unlock	7 Tabs (B)
--------	------------

Fig. D3



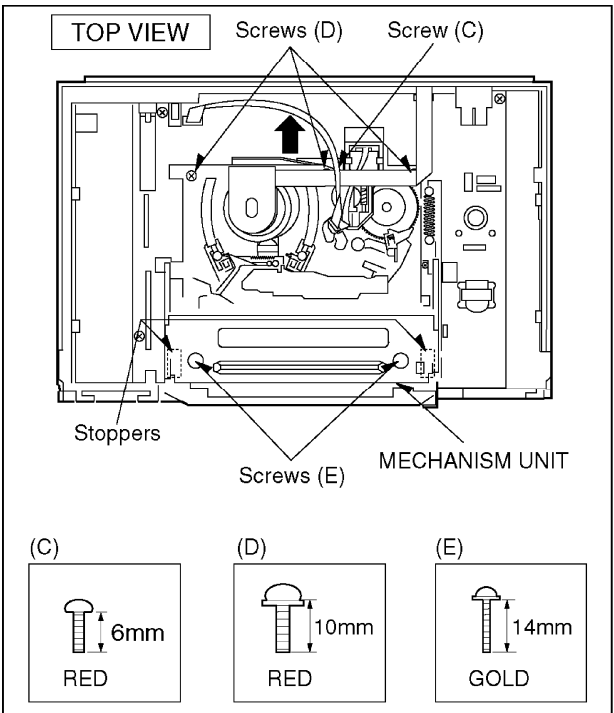
3. REMOVAL OF THE MECHANISM UNIT

Remove	Screw (C)
Remove	3 Screws (D)
Remove	2 screw (E)

Note:

1. Keep pressing 2 stoppers on Cassette Holder Plate and Press Cassette Holder Plate to the rear.
2. Remove the Mechanism Unit after bend the Cylinder Shield in the direction of the arrow.

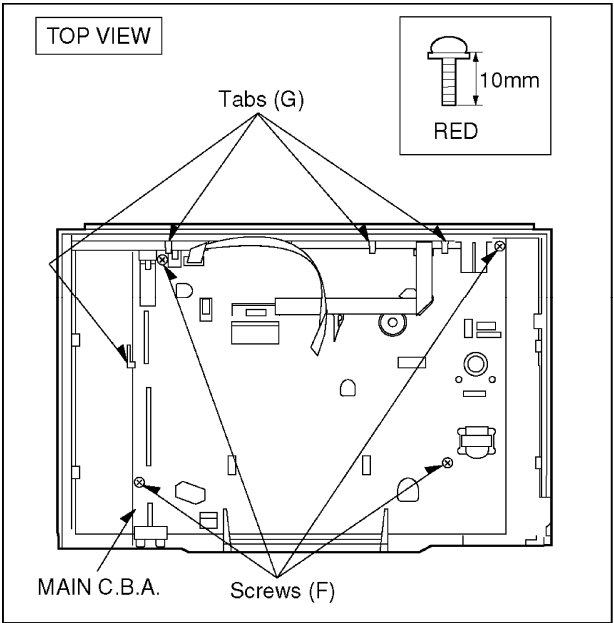
Fig. D4



4. REMOVAL OF THE MAIN C.B.A.

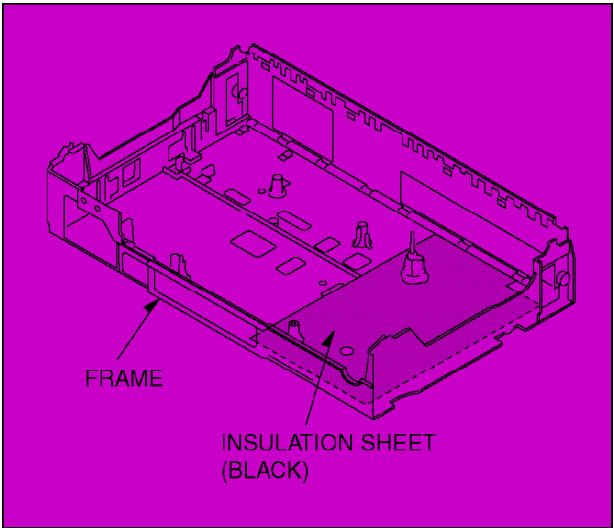
Remove	4 screws (F)
Unlock	4 Tabs (G)

Fig. D5



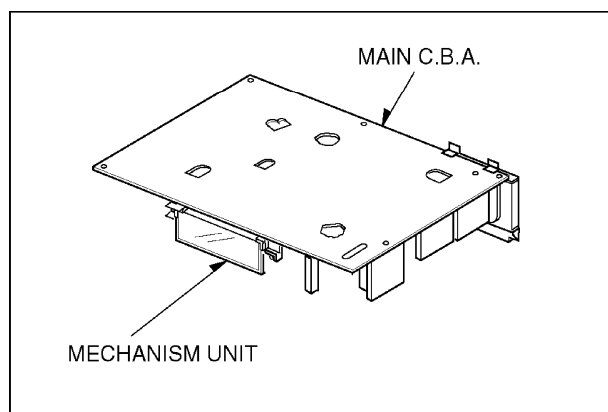
NOTE:
Before mounting the MAIN C.B.A. onto the frame, be sure to confirm that the insulation sheet is mounted on the frame as shown in Fig. D6.

Fig. D6



5. SERVICING POSITION

Fig. D7



3.2. MECHANICAL ADJUSTMENT PROCEDURES

Refer to the Service Manual for Z-Mechanism Chassis. / (Order No. VRD9802005C2)

3.3. ELECTRICAL ADJUSTMENT PROCEDURES

3.3.1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope

- Voltage Range: 0.005-5V/div
- Frequency Range: DC-35MHz
- Probes: 10:1 / 1:1

2. Frequency Counter

- Frequency Range: 0-10MHz
- Probes: 1:1

3. Universal Counter

4. Digital Volt Meter (D.V.M.)

5. Video Sweep Generator

6. Sinewave Generator

7. Video Pattern Generator

8. Monitor TV

9. DC Power Supply

10. VHS Blank Tape

11. VHS Alignment Tape

- Parts No.: VFJ8125H3F(PAL)

3.3.2. VCR SETTING

When no indication in the procedure, set each selector as follows.

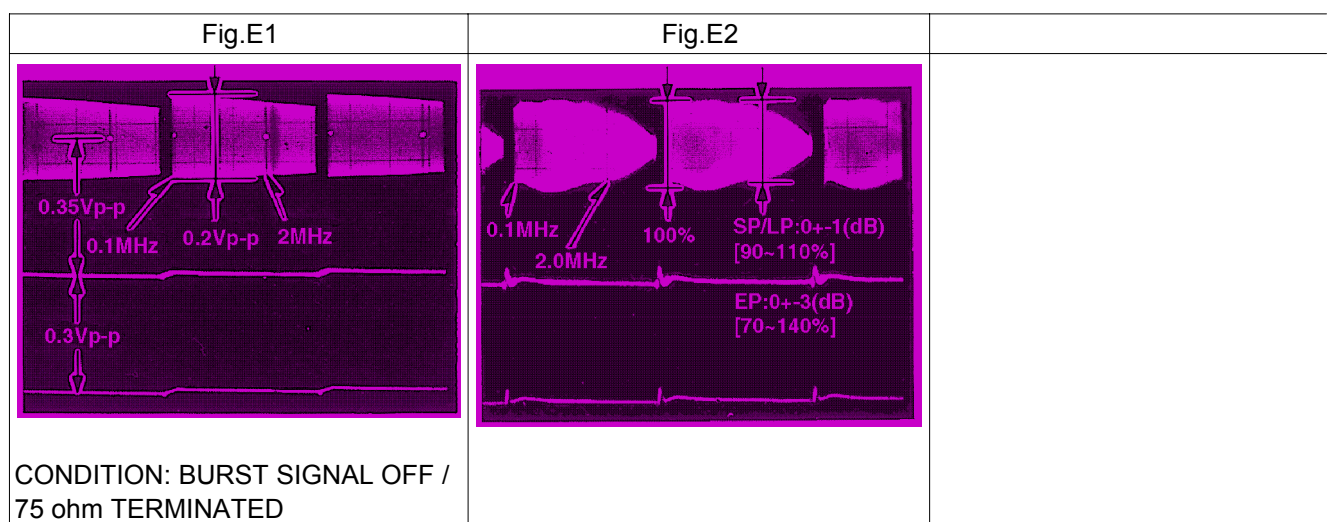
1. TAPE SPEED: SP

2. CHANNEL: AV1/AV2

(Set to signal input terminal number)

3.3.3. ADJUSTMENTS

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC.	REMARKS
PG SHIFTER / ADJUSTMENT	---	---	PLAYBACK	---	ALIGNMENT TAPE / (PAL)	---	---	Refer to procedure of PG SHIFTER ADJUSTMENT as shown in Fig.E3.
AI FUNCTION / ADJUSTMENT	---	---	PLAYBACK / (SELF-REC)	PAL / COLOUR BAR	BLANK / TAPE	---	---	Refer to the procedure AI FUNCTION ADJUSTMENT as shown in Fig.E4.
VIDEO / FREQUENCY / RESPONSE / ADJUSTMENT	VIDEO OUT	---	SP/LP/EP / PLAYBACK / (SELF-REC)	VIDEO / SWEEP / (See Fig.E1)	BLANK TAPE	OSCILLOSCOPE / VIDEO SWEEP GENERATOR	SP: 0+-1 (dB) (90~110%) LP: 0+-1 (dB) (90~110%) EP: 0+-3 (dB) (70~140%) (See Fig. E2)	Refer to the procedure VIDEO FREQUENCY RESPONSE ADJUSTMENT as shown in Fig. E5.



3.3.4. PG SHIFTER ADJUSTMENT / (AUTOMATIC)

PROCEDURES	FIP DISPLAY
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key once.	
Insert the Alignment cassette tape. (PAL:VFJ8125H3F)	
When the sequence of the automatic adjustment has been terminated, the following action has been made. *SUCCEED: The cassette tape is ejected. *ERROR : The "F2" is displayed on the FIP. (Check the Servo/Syscon circuit and Cylinder unit.)	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E3

3.3.5. AI FUNCTION ADJUSTMENT (AUTOMATIC)

PROCEDURES	FIP DISPLAY
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key in 3 times.	
Insert the blank cassette tape. (The adjustment is automatically started.)	
When the sequence of the automatic adjustment has been terminated successfully, the VCR goes to STOP mode.	

PROCEDURES	FIP DISPLAY
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E4

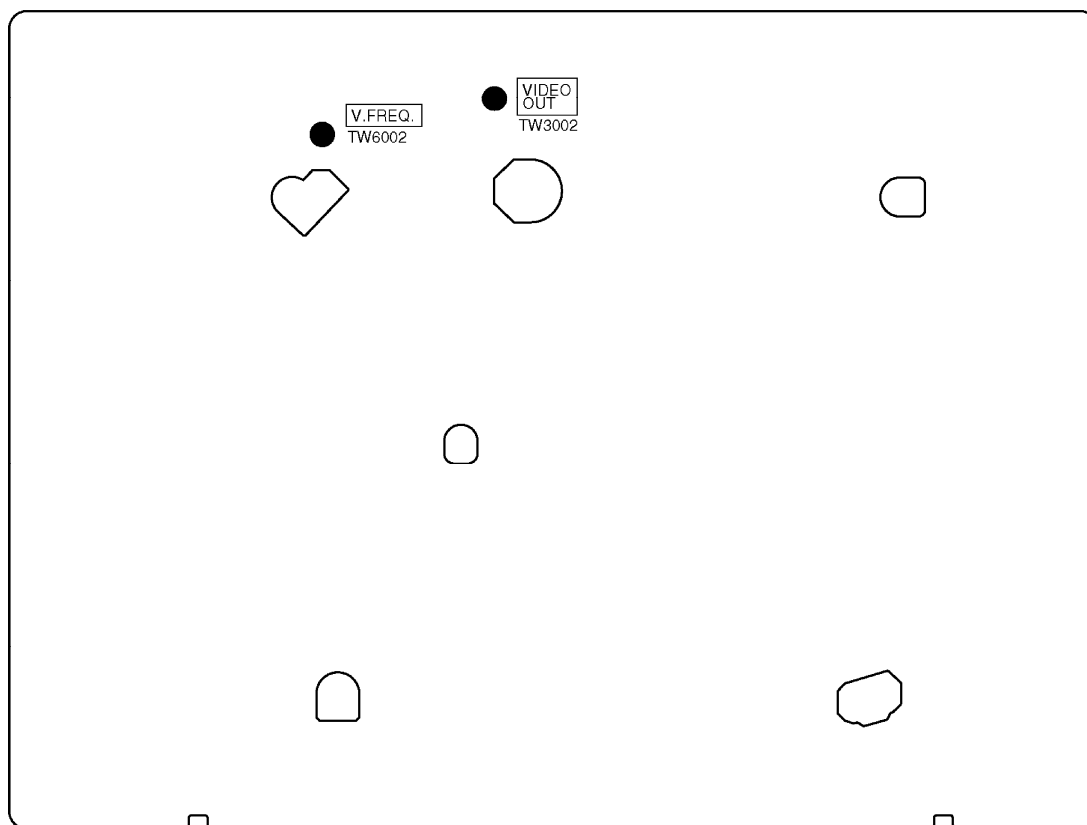
3.3.6. VIDEO FREQUENCY RESPONSE ADJUSTMENT

PROCEDURES	FIP DISPLAY
Input the Video sweep signal. (See Fig.E1)	
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP and/or CH DOWN key until "11" is displayed on FIP.	
Insert the Self-recorded tape and playback it. (SP/LP/EP mode)	
Connect the Oscilloscope to: *CH1....Video Out (TW3002). *CH2....V.FREQ.(TW6002)	
Press the "4" key on the remote controller. (Confirm that TW6002 becomes high(5V)).	
Adjust the Frequency response by pressing the "2"(increase) and/or "8"(decrease) key on the Remote Controller. (See Fig.E2)	
Store the Adjusted value by pressing the "5" key on the Remote Controller.	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E5

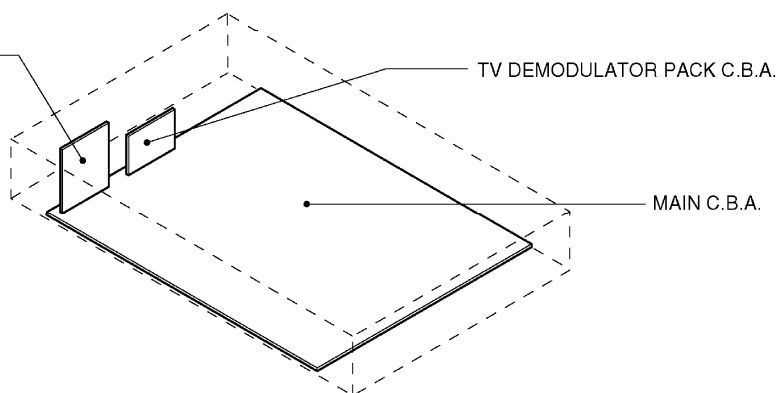
3.3.7. LOCATION OF TEST POINTS & CONTROLS

MAIN C.B.A.



3.3.8. CIRCUIT BOARD LAYOUT

DECODER PACK C.B.A.
(EG/EGY)
NICAM DECODER
PACK C.B.A.
(B/BL/EC/ECM/ECN/ECY)



443NT [L]	4.43 NTSC ①	BIL	BILINGUAL
A. COMP	AUDIO COMPONENT SIGNAL	BIL [L]	BILINGUAL ①
A. COMPO	AUDIO COMPONENT SIGNAL	BIL. [H]	BILINGUAL ②
A. D.P [L]	AUDIO DUBBING PAUSE ①	BIL/M1 [L]	BILINGUAL ①
A. D/L [L]	AUDIO DUBBING PAUSE ①	BS CLOCK	BS CLOCK
A. DEF [S]	AUDIO DEFEAT	BS DATA	BS DATA
A. DEF [S] [L]	AUDIO DEFEAT	BS LCH IN	BS L CHANNEL INPUT
A. DUB P [L]	AUDIO DUBBING PAUSE ①	BS MIX [H]	BS MIX ②
A. DUB [H]	AUDIO DUBBING ②	BS MON [H]	BS MONITOR ②
A. ERASE	AUDIO ERASE	BS MONI [H]	BS MONITOR ②
A. H. SW	AUDIO HEAD SWITCHING PULSE	BS RCH IN	BS R CHANNEL INPUT
A. HEAD [R]	AUDIO HEAD (REC)	BS VIDEO	BS VIDEO SIGNAL
A. HEAD [W]	AUDIO HEAD (PLAY)	BS VIDEO/BS1	BS VIDEO SIGNAL
A. IN [L]	AUDIO INPUT (L)	BS [H]	BS ②
A. IN [R]	AUDIO INPUT (R)	BS. LEVEL	BS LEVEL
A. MUT [H]	AUDIO MUTE ②	BS. M [H]	BS MONITOR ②
A. MUTE [H]	AUDIO MUTE ②	BS/VTR [H]	BS/VTR ②
A. OUT [L]	AUDIO OUTPUT (L)	BUS CLK	BUS CLOCK
A. OUT [R]	AUDIO OUTPUT (R)	BUS LSN	BUS LISTEN
A. RF OUT	AUDIO RF SIGNAL OUTPUT	BUS TLK	BUS TALK
A/VS/S. DATA	AV SW/SERIAL DATA	BUZZER	BUZZER
AC ONLINE	AC ONLINE	CAP EC	CAPSTAN TORQUE CONTROL
AC. O/EE. H	AC ONLINE/EE ②	CAP M GND	CAPSTAN MOTOR GND
AFC S C	AFC S CURVE	CAP. ET	CAPSTAN TORQUE CONTROL
AFC [S]	AFC S CURVE	CAP. FG1	CAPSTAN FG1 PULSE
AFC. DEF	AFC DEFEAT	CAP. FG2	CAPSTAN FG2 PULSE
ARFC OUT	AUDIO RF SIGNAL OUTPUT	CAS. SW	CASSETTE SW
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL	CCN	PLAYBACK CONTROL SIGNAL (-)
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI	CCP	PLAYBACK CONTROL SIGNAL (+)
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL ②/NORMAL	CHM	CONTROL SIGNAL (+)
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL	CHP	CONTROL SIGNAL (-)
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE	CINEM [L]	CINEMA ①
AUDIO IN [L]	AUDIO INPUT (L)	CINEMA [L]	CINEMA ①
AUDIO IN [R]	AUDIO INPUT (R)	CINEMA/MIX	CINEMA/MIX
AUDIO OUT [L]	AUDIO OUTPUT (L)	CKL	RATCH LOCK
AUDIO OUT [R]	AUDIO OUTPUT (R)	CKS	SHIFT LOCK
AUDIO SELECT [H]	AUDIO SELECT ②	CL	CLOCK
AUDIO. L	AUDIO (L)	CLK	CLOCK
AUDIO. R	AUDIO (R)	CLK (C.G)	CLOCK
AV CNT	AV CONTROL	CLOCK. IN	CLOCK INPUT
AV CTL	AV CONTROL	CLP	CLAMP
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK	COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
AV. C.M.	AV CONTROL MODE	COLOR [H]	COLOUR ②
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)	CONV	CONVERTOR
AVSW/METER. L	AV SW/LEVEL METER (L)	CS	CHIP SELECT
B MODE. H	B MODE ②	CTL GND	CONTROL GND
B.G.P	BURST GATE PULSE	CTL HEAD [+]	CONTROL HEAD (+)
BACKUP 5V	BACK UP 5V	CTL HEAD [-]	CONTROL HEAD (-)
BAND. U.E.	BAND U	CTL [+]	CONTROL HEAD (+)
BANDVL. D	BAND VL	CTL [-]	CONTROL HEAD (-)
BI/MI [L]	BILINGUAL/MIX ①	CUE BIAS	CUE BIAS
		CURRENT LIM	CURRENT LIMMITER
		CYL ET	CYLINDER TORQUE CONTROL

CYL GND	CYLINDER GND	FULL. E. 12V	FULL ERASE 12V
D.F.M. REC [H]	DELAIED FM RECORDING Ⓜ	GND [A]	GND (ANALOG)
D. FM REC [L]	DELAIED FM RECORDING Ⓛ	GND [TU]	GND (TUNER)
D. GND	DIGITAL GND	GND/N. SW. 12V	GND/NON SW 12V
D. REC [H]	DELAYED RECORDING Ⓜ	H. SYNC	HORIZONTAL SYNC
D4/S. LED	D4/STILL LED	H. AMP. SW	HEAD AMP SW PULSE
D4/STILLED	D4/STILL LED	H. P <R>	HEAD PHONE (R)
DAC [CLK]	TUNER DAC (CLOCK)	H. P <L>	HEAD PHONE (L)
DAC/FSCS	TUNER DAC/FS CHIP SELECT	H. P GND	HEAD PHONE GND
DAREC [H]	DELAYED AUDIO RECORDING Ⓜ	H. P OUT [L]	HEAD PHONE OUTPUT (L)
DATA	DATA	H. P OUT [R]	HEAD PHONE OUTPUT (R)
DECODER [L]	DECODER (L)	H. SW	HEAD SW PULSE
DECODER [R]	DECODER (R)	HEAD PHONE [L]	HEAD PHONE (L)
DEW	DEW	HEAD PHONE [R]	HEAD PHONE (R)
DEW SNS	DEW SENSOR	HEAD SW	HEAD SW
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓜ	HEATER [+]	HEATER (+)
E. REC 5V	EXCEPT RECORDING 5V	HEATER [-]	HEATER (-)
EC	ERROR TORQUE CONTROL	HSS	HORIZONTAL SYNC SIGNAL
ECR	ERROR TORQUE CONTROL	HTR [+]	HEATER (+)
	REFERENCE VOLTAGE	HTR [-]	HEATER (-)
EDT TRIG [L]	EDIT TRIGGER Ⓛ	I RFE	REFERENCE CURRENT
EDIT [H]	EDIT Ⓜ	ICL	CONTROL AGC CIRCUIT
EE [H]	EE Ⓜ	IF	INTERMEDIATE FREQUENCY
EE [H]/INS [M]	EE Ⓜ/INSERT Ⓜ	IN SELA1	INPUT SELECT A1 POSITION
EE. VV. TR	EE/VV/TRICK PLAY	IN SELA2	INPUT SELECT A2 POSITION
EJECT. PO	EJECT POSITION	IN SELA3	INPUT SELECT A3 POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK	INS L/R [L]	INSERT Lch/Rch Ⓛ
ENV. SEL	ENVELOPE SELECT	INS. [H]	INSERT Ⓜ
ENVE. OUT	ENVELOPE OUTPUT	INSEL A1	INPUT SELECT A1 POSITION
ENVE. SEL	ENVELOPE SELECT	INSEL A2	INPUT SELECT A2 POSITION
ENV SELECT	ENVELOPE SELECT	INSERT	INSERT
EP [H]	LP Ⓜ	INSERT [H]	INSERT Ⓜ
EP/LP [H]	LP Ⓜ	IO CS	INPUT/OUTPUT CHIP SELECT
EP/LP/SP	LP/SP	JOG1	JOG1
EP/SS [H]	LP/SLOW/STILL/STOP Ⓜ	JOG S3 LED/FOWRD	JOG LED/FORWARD LED
EPROMCS	EPROM CHIP SELECT	JOG/F. LED	JOG LED/FORWARD LED
EX. REC 5V	EXCEPT RECORDING 5V	JSB [H]	JSB Ⓜ
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ	JST. CLCK	JUST CLOCK
FG1 IN	FG1 PULSE INPUT	JST. CLK	JUST CLOCK
FG2 IN	FG2 PULSE INPUT	JST. CLOCK	JUST CLOCK
FILTER ADJUSTMENT	FILTER ADJUSTMENT	L. OUT	Lch OUTPUT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓜ	L. CH [H]	Lch Ⓜ
FLY ON [H]	FLYING ERASE HEAD ON Ⓜ	L. CH [L]	Lch Ⓛ
FLY. E [H]	FLYING ERASE HEAD ON Ⓜ	LED (MAIN)	LED (MAIN)
FM MUT [H]	FM AUDIO MUTE Ⓜ	LED (STEREO)	LED (STEREO)
FM MUTE [H]	FM AUDIO MUTE Ⓜ	LED (SUB)	LED (SUB)
FM OUT [L]	FM OUTPUT (L)	LED CKL	LED SERIAL CLOCK
FM OUT [R]	FM OUTPUT (R)	LED CKS	LED SERIAL CLOCK
FM PACK OUT [L]	FM PACK OUTPUT (L)	LED DATA	LED SERIAL DATA
FM PACK OUT [R]	FM PACK OUTPUT (R)	LINE IN 1 [L]	LINE INPUT 1 (L)
FM/BS SEL [L]	FM/BS SELECT (L)	LINE IN 1 [R]	LINE INPUT 1 (R)
FM/BS SEL [R]	FM/BS SELECT (R)	LINE IN 2 [L]	LINE INPUT 2 (L)
FS. CLK	FS CLOCK	LINE IN 2 [R]	LINE INPUT 2 (R)
FUL. E [H]	FULL ERASE HEAD ON Ⓜ	LINE IN V	LINE INPUT VIDEO
FULL. E [H]	FULL ERASE HEAD ON Ⓜ	LINE IN [L]	LINE INPUT (L)

LINE IN [R]	LINE INPUT (R)	P-OFF [H]	POWER OFF $\textcircled{\text{H}}$
LINE OUT [L]	LINE OUTPUT (L)	P-OFF [L]	POWER OFF $\textcircled{\text{L}}$
LINE OUT [R]	LINE OUTPUT (R)	P. FAIL	POWER FAILURE DETECT
LP [H]	LP $\textcircled{\text{H}}$	P. OFF [H]	POWER OFF $\textcircled{\text{H}}$
LPTRI [L]	LP TRICK PLAY $\textcircled{\text{L}}$	P. OFF [L]	POWER OFF $\textcircled{\text{L}}$
Lch/A. DUB	Lch/AUDIO DUBBING	PAL [H]	PAL $\textcircled{\text{H}}$
M GND	MOTOR GND	PAL [L]/NTSC [H]	PAL $\textcircled{\text{L}}$ /NTSC $\textcircled{\text{H}}$
M REG	MOTOR REGULATOR	PB ADJ OUT	PLAYBACK ADJUST OUTPUT
MAIN OUT	MAIN OUTPUT	PB OUT	PLAYBACK OUTPUT
MAIN [L]	MAIN $\textcircled{\text{L}}$	PB. H	PLAYBACK $\textcircled{\text{H}}$
MAIN/MONO	MAIN/MONAUURAL	PFG	PG/FG
MAX IN	MAXIMAM INPUT	PHOTSN +B	PHOTO SENSOR +B
MES [H]	MESECAM $\textcircled{\text{H}}$	PICT. CNT	PICTURE CONTROL
MESE [H]	MESECAM $\textcircled{\text{H}}$	PLAY LED/RVS LED	PLAY LED/REVERSE LED
MESE [L]	MESECAM $\textcircled{\text{L}}$	PLAY. PO	PLAY POSITION
METER 5V	LEVEL METER 5V	PLAY/R. LED	PLAY LED/REVERSE LED
METER [L]	LEVEL METER (L)	PLY/DEW	PLAY/DEW $\textcircled{\text{H}}$
METER [R]	LEVEL METER (R)	POWER OFF [L]	POWER OFF $\textcircled{\text{L}}$
METER. L/AVS	LEVEL METER (L)	PREROLL [H]	PREROLL $\textcircled{\text{H}}$
METER. R/AVC	LEVEL METER (R)	PWRFAIL	POWER FAILURE DETECT
MI/BI [L]	MIX $\textcircled{\text{H}}$ /BILIGUAL	R. CH [H]	Rch $\textcircled{\text{H}}$
MIC GND	MIC GND	R. CH [L]	Rch $\textcircled{\text{L}}$
MIC IN	MIC INPUT	R. ST	RESET
MIC IN [L]	MIC INPUT (L)	R/S/F	REVERSE $\textcircled{\text{H}}$ /STOP $\textcircled{\text{M}}$ /FORWARD $\textcircled{\text{L}}$
MIC IN [R]	MIC INPUT (R)	RCH [H]	Rch $\textcircled{\text{H}}$
MIC [H]	MIC $\textcircled{\text{H}}$	REC 12V	RECORDING 12V
MIX [H]	MIX $\textcircled{\text{H}}$	REC CHROMA	RECORDING CHROMINANCE SIGNAL
MIX [H]/CINEMA [L]	MIX $\textcircled{\text{H}}$ /CINEMA SOUND $\textcircled{\text{L}}$	REC H	RECORDING $\textcircled{\text{H}}$
MIX/CINE	MIX $\textcircled{\text{H}}$ /CINEMA SOUND $\textcircled{\text{L}}$	REC IN	RECORDING INPUT
MIX/CINEMA [L]	MIX $\textcircled{\text{H}}$ /CINEMA SOUND $\textcircled{\text{L}}$	REC OUT [L]	RECORDING OUTPUT $\textcircled{\text{L}}$
MN. H/M. L	MONAURAL $\textcircled{\text{H}}$ /MAIN $\textcircled{\text{L}}$	REC START	RECORDING START
MN. H/MAI. L	MONAURAL $\textcircled{\text{H}}$ /MAIN $\textcircled{\text{L}}$	REC VR [C]	RECORDING VOLUME (COMMON)
MN2/MES. L	MONAURAL 2/MESECAM $\textcircled{\text{L}}$	REC VR [L]	RECORDING VOLUME (L)
MODE SEL	AUDIO MODE SELECT	REC VR [R]	RECORDING VOLUME (R)
MODE SW	AUDIO MODE SW	REC Y	RECORDING LUMINANCE SIGNAL
MODE. S. IN	AUDIO MODE SELECT INPUT	REC [H]	RECORDING $\textcircled{\text{H}}$
MODE. S. OUT	AUDIO MODE SELECT OUTPUT	REC. C	RECORDING CHROMINANCE SIGNAL
MONO [H]	MONAURAL $\textcircled{\text{H}}$	REC. Y	RECORDING LUMINANCE SIGNAL
MONO [H]/MAIN [L]	MONAURAL $\textcircled{\text{H}}$ /MAIN $\textcircled{\text{L}}$	REC/EE CTL	RECORDING/EE CONTROL
MONO2 [L]	MONAURAL 2	REEL-T	REEL PULSE (TAKE-UP)
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM $\textcircled{\text{L}}$)	REEL-S	REEL PULSE (SUPPLY)
MOTOR GND	MOTOR GND	REGULATOR FILTER	REGULATOR FILTER
MUTE	MUTE	RESET	RESET
N. A. REC [L]	NORMAL AUDIO RECORDING	REV M F/R	REVIEW MOTOR
N. SW 12V	NON SW 12V		FORWARD/REVERSE
N. SW. 5. DET	NON SW 5V DETECT	REV M V1	REVIEW MOTOR V1
NICAM	NICAM	REV M V2	REVIEW MOTOR V2
NICAM [L]	NICAM $\textcircled{\text{L}}$	REV MOTOR F/R	REVIEW MOTOR
NOL [H]	PAL $\textcircled{\text{H}}$ /4.43 NTSC $\textcircled{\text{M}}$ /3.58 NTSC $\textcircled{\text{L}}$		FORWARD/REVERSE
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY $\textcircled{\text{H}}$	REV MOTOR V1	REVIEW MOTOR V1
NORMAL [H]	NORMAL $\textcircled{\text{H}}$	REV MOTOR V2	REVIEW MOTOR V2
NR BIAS	NR BIAS	REV MOTOR [+]	REVIEW MOTOR (+)
NTSC [L]	NTSC $\textcircled{\text{L}}$	REV MOTOR [-]	REVIEW MOTOR (+)
OCH	CONTROL AGC CIRCUIT	REV. M. GND	REVIEW MOTOR GND
OUT	OUTPUT	RF. CHROMA	RF CHROMINANCE SIGNAL

RF OUT	RF OUTPUT	SYSCON 5V	SYSTEM CONTROL 5V
RF Y	RF LUMINANCE SIGNAL	SYSTEM	SYSTEM SW
RF. Y. IN	RF LUMINANCE SIGNAL INPUT	T-PHOTO	TAKE-UP PHOTO TRANSISTOR
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT	T-RL. PLS	TAKE-UP REEL PULSE
ROTAR. SW	ROTARY SW	T. BUSCLK	TIMER BUS CLOCK
ROTARY	ROTARY SW	T. BUSLSN	TIMER BUS LISTEN
RST	RESET	T. BUSTLK	TIMER BUS TALK
RST [L]	RESET ①	T. END [L]	TAPE END ①
Rch/INST	Rch/INSERT	T. PHOTO	TAKE-UP PHOTO TRANSISTOR
S IN	SERIAL DATA INPUT	TAPE END [L]	TAPE END ①
S OUT	SERIAL DATA OUTPUT	TAPE END [L]/CAM	TAPE END ①/CAMERA PAUSE
S-PHOTO	SUPPLY PHOTO TRANSISTOR	TEST	TEST MODE
S-RL. PLS	SUPPLY REEL PULSE	TPZ	TRAPEZOIDAL WAVE CIRCUIT
S. CLK	SERIAL CLOCK	TRIC [L]	TRIC PLAY ①
S. CLK/AV	SERIAL CLOCK/AV	TRICK [L]	TRIC PLAY ①
S. DATA	SERIAL DATA	TRK. ENV	AUTO TRACKING ENVELOPE DETECT
S. DATA/A	SERIAL DATA	TU. AUDIO	TUNER AUDIO
S. PHOTO	SUPPLY PHOTO TRANSISTOR	TU. GND	TUNER GND
S. TAB [L]	SAFETY TAB SW ON ①	TU. V. IN	TUNER VIDEO SIGNAL INPUT
S/P/N	SECAM/PAL/NTSC	TU. VIDEO	TUNER VIDEO
SC IN	SERIAL CLOCK INPUT	TUN NOR IN	TUNER NORMAL INPUT
SC OUT	SERIAL CLOCK OUTPUT	TUN R	TUNER AUDIO (R)
SCK SELECT	SERIAL CLOCK SELECT	TUN. AUDIO IN	TUNER AUDIO INPUT
SEL OUT [L]	SELECT OUTPUT (L)	TUNER 12V	TUNER 12V
SEL OUT [R]	SELECT OUTPUT (R)	TUNER L	TUNER AUDIO (L)
SHUTTLE 1	SHUTTLE 1	TUNER V IN	TUNER VIDEO SIGNAL INPUT
SIF	SOUND INTERMEDIATE FREQUENCY	TUNER [L]	TUNER AUDIO (L)
SLMUT [H]	INPUT SELECT MUTE ①	TUNER [N]	TUNER AUDIO (NORMAL)
SLNID [+]	SOLENOID (+)	TUNER [R]	TUNER AUDIO (R)
SLNID [-]	SOLENOID (-)	TUNER. 12	TUNER 12V
SLW TR. MM	SLOW TRACKING MONO MULTI	TUOFF [H]	TUNER OFF ①
SLW TR. REF	SLOW TRACKING REFERENCE	TV. AUDIO	TV AUDIO
	VOLTAGE	TV/VTR	TV/VTR
SNS. GND	SENSOR GND	TXTON [L]	TEXT ON ①
SOFT [H]	SOFT TAPE PLAY ①	U. REG45V	UNREGULATOR 45V
SOFT [H]/NORMAL	SOFT TAPE PLAY ①/NORMAL ①	UNREG	UNREGULATOR
SOLENOID ON [L]	SOLENOID ON ①	UNREG19V	UNREGULATOR 19V
SP [H]	SP ①	V. REF	REFERENCE VOLTAGE
SP/L/SLP	SP/LP	V. EE [H]	VIDEO EE ①
SSS [L]	SLOW/STILL/STOP	V. EE [L]	VIDEO EE ①
STEREO LED	STEREO LED	VCO REF	REFERENCE OSCILLATER
STEREO [H]	STEREO ①	VD. IN	VIDEO SIGNAL INPUT
STEREO [L]	STEREO ①	VD. OUT	VIDEO SIGNAL OUTPUT
STOP. PO	STOP POSITION	VIDEO EE [L]	VIDEO EE ①
STOP/5V	STOP POSITION/5V	VIDEO IN	VIDEO SIGNAL INPUT
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT	VIDEO OUT	VIDEO SIGNAL OUTPUT
STOP1/PAL:ST	STOP1 POSITION/PAL	VM	MOTOR VOLTAGE
STOP2. PO	STOP 2 POSITION	VM DOWN [L]	MOTOR VOLTAGE DOWN ①
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW	VSS	VERTICAL SYNC SIGNAL
STREO [H]	STEREO ①	VTR [H]	VTR ①
SUB BIAS	SUB BIAS	VTR. 12V	VTR 12V
SUB. SW	SUB SW	X IN	OSCILLATOR INPUT
SVHS CAS [L]	S-VHS CASSETTE ①	X OUT	OSCILLATOR OUTPUT
SW. 5. DET	SW 5V DETECT		
SYNC [L]	SYNC ①		

For your safety please read the following text carefully

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

- Blue: Neutral
- Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

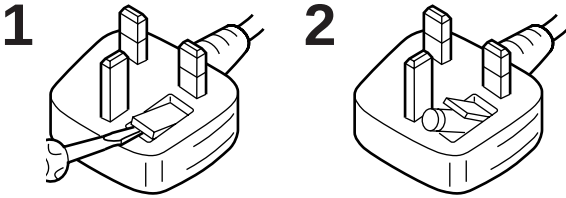
Under no circumstance should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol .

How to replace the Fuse

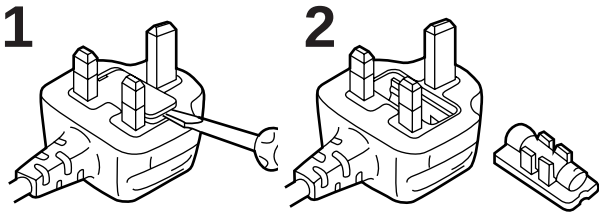
- There are two types of the AC Mains Lead assembly: **A** and **B** as shown below.

- Open the fuse compartment with a screwdriver.
- Replace the fuse and fuse cover.

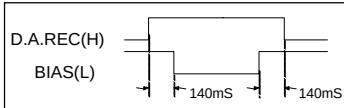
TYPE A



TYPE B



No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
1	CURRENT_LIMIT	O	Capstan motor current limit terminal.	Low	Low	Low	Low
2	F ADJUST	O	Analogue voltage output for HEAD frequency response adjustment	Low	Low	Low	Low
3	N.C.	--	Low fix (No Connection.)	Low	Low	Low	Low
4	C EMPHA(H)	O	Terminal of the Current emphasis video/FM audio recording current. [HIFI/2HEAD]:Fix to Low (Normal mode) [4HEAD] :Fix to Low (factory mode) Fix to High (Insert/AV Insert mode) Others (Depend on tape speed)	Low	Low	Low	Low
5	TRACKING_ENVE	O	Playback envelope input for auto tracking adjustment and cvc.	In	In	In	In
6	SLP(H)	O	Tape running speed output terminal.(Output signal depends on tape speed) [High].....During NTSC_10H or PAL_9H mode [Low].....Except NTSC_10H or PAL_9H mode	Low	Low	Low	Low
7	LP(H)	O	Tape running speed output terminal.(Output signal depends on tape speed) [High].....During NTSC_4H/6H or PAL_6H/9H mode [Low].....Except NTSC_4H/6H or PAL_6H/9H mode 2HEAD model: Low Fix	Low	Low	Low	Low
8	CPB	I	Input terminal for "PB (H)" from AV2. [High].....3.85V - 5.0V [Midd].....1.82V - 2.84V [Low]..... 0V - 0.81V	In	In	In	In
9	AFC S	I	"S-curve" Input terminal from tuner.	In	In	In	In
10	A-MUTE(H)	O	Audio mute output terminal for RF Converter.	High	High	Low	High
11	AV1_8IN	I	Input terminal for "PB (H)" from AV1. [High].....3.85V - 5.0V [Midd].....1.82V - 2.84V [Low]..... 0V - 0.81V	In	In	In	In
12	N/S/T2/T3	I	Mode select terminal [NORMAL mode]: More than 4.0V [SERVICE mode]: 2.5V - 4.0V [TEST_2 mode]: 1.0V - 2.5V [TEST_3 mode]: 0V - 1.0V	In	In	In	In
13	S-PHOTO	I	Tape end sensor input terminal.(Photo sensor input from supply side) [Black Tape]: more than 2.6V [Lead Tape]: Less than 2.4V	In	In	In	In
14	T-PHOTO	I	Tape beginning sensor input terminal.(Photo sensor input from take-up side) [Black Tape]: more than 2.6V [Lead Tape]: Less than 2.4V	In	In	In	In
15	ABS_NORM(H)	I	(Input terminal for FM audio enverope output level detection)	In	In	In	In
16	N.C	--	Low fix (No Connection.)	Low	Low	Low	Low
17	PLAY_REC(L)	O	Output terminal for switching the capstan voltage. [Other than PLAY/REC mode].....Always "High". [JOG/Shuttle mode in PLAY mode].....Always "High". After 5 seconds from PLAY/REC mode completion, it changes to "Low". During "Low" outputs, it checks every main capstan FG, when the no FG is inputted in a rotation, it changes to "High" and it keeps "high" by cassette ejection.	Low	Low	Low	Low
18	VSYNC(L)	O	Output terminal for V_sync detection result. [Vsync exist] : "Low" [Vsync not exist: "High"	Low	Low	Low	Low
19	D.FM.REC(H)	O	Timing output terminal for FM_Audio recording current.	Low	Low	Low	Low
20	ART.V/H/N	O	Output terminal for Artificial V synchronization signal.	Low	Low	Low	Low

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset												
21	ROTARY.SW	O	Output terminal for rotary switch.	Low	Low	Low	Low												
22	H.A.SW	O	Output terminal for HEAD AMP switch.	Low	Low	Low	Low												
23	ENVE.SELECT	I	Input terminal for enverope selection.	Low	Low	Low	Low												
24	VIDEO.H.SW	O	Output terminal for video HEAD switch.	Low	Low	Low	Low												
25	A.H.SW	O	Output terminal for FM audio HEAD switch.	Low	Low	Low	Low												
26	A.DEF(H)	O	Audio Mute output terminal for tuner and decoder. [High].....During VCR mode is NORMAL PLAY and VV mode.	Low	Low	Low	Low												
27	PROG.ON(H)	O	I/O control to switch IIC bus for LW-programmer. H:IIC bus is connected to AV2. L:IIC bus is not connected to AV2.	Low	Low	Low	Low												
28	AVPB-H(L)	O	"PB-(H)"output terminal for AV2 *Details, refer to 21pin control specifications. *The signal output from Pin-8 of 21pin terminal is shown below. <table><tr><th>pin8 \ Name</th><th>AVPB-H(L)</th><th>AVPBM-(H)</th></tr><tr><td>High</td><td>L</td><td>Hi-Z</td></tr><tr><td>Middle</td><td>H</td><td>Hi-Z</td></tr><tr><td>Low</td><td>H</td><td>L</td></tr></table>	pin8 \ Name	AVPB-H(L)	AVPBM-(H)	High	L	Hi-Z	Middle	H	Hi-Z	Low	H	L	High	High	Low	High
pin8 \ Name	AVPB-H(L)	AVPBM-(H)																	
High	L	Hi-Z																	
Middle	H	Hi-Z																	
Low	H	L																	
29	AVPB-M(H)	O		Low	Low	Low	Low												
30	GND(D)	--	GND	---	---	---	---												
31	20MHz.IN	I	Main oscillator input	---	STOP	STOP	---												
32	20MHz.OUT	O	Main oscillator output	---	STOP	STOP	---												
33	+5V(D)	I	5V input terminal	---	---	---	---												
34	32KHz IN	I	Sub oscillator input	---	---	---	---												
35	32KHz OUT	O	Sub oscillator output	---	---	---	---												
36	VCONT	I	Video Control	---	---	---	---												
37	V EE(L)	O	Output terminal for switch between EE and VV.	Low	Low	Low	Low												
38	D REC(H)	O	Output terminal for video recording current control.	Low	Low	Low	Low												
39	D.A.REC(H)	O	Control terminal for normal audio recording current.	Low	Low	Low	Low												
40	BIAS(L)	O	Bias oscillation Control terminal for Linear audio recording current. 	High	Hi-Z	Hi-Z	High												
41	FM.MUTE(H)	O	Output terminal for audio mute control.	High	High	Low	High												
42	FULL ERASE(H)	O	Output terminal for control FULL ERASE HEAD.	Low	Low	Low	Low												
43	POWER_KEY	I	Input terminal for the unit power button. It switches ON to OFF and/or OFF to ON when down edge is detected.	In	In	In	In												
44	POS.SW3	I	Input terminal for mecha position.	In	In	In	In												
45	POS.SW2	I	Input terminal for mecha position.	In	In	In	In												
46	POS.SW1	I	Input terminal for mecha position.	In	In	In	In												
47	POWER OFF(H)	O	ON/OFF Control terminal for power circuit. Power off condition: "High" is existed. ("Low" is existed when the mechanism and/or circuit operation is activated.)	High	High	Low	High												
48	FIP(L)	O	Output terminal for FIP on/off control signal. ("Low" is existed when the power off condition under the "FIP OFF" setting.)	Not fix	High	Low	Low												
49	P50 IN	I	Input terminal for Project 50 serial signal.	In	In	In	In												
50	LC.OSC IN	I	The oscillation input terminal for OSD dot clock.	---	---	---	---												

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
51	LC.OSC OUT	O	The oscillation output terminal for OSD dot clock.	---	---	---	---
52	RESET(L)	I	Input terminal for microprocessor reset.	In	In	In	In
53	4FC.LPF	I	4fc clock input terminal	---	---	---	---
54	OSD.FSC IN	I	OSD clock input terminal	---	---	---	---
55	5V(OSD)	I	5V input terminal	---	---	---	---
56	CVIN	I	Input terminal for Composite video signal.	---	---	---	---
57	GND(OSD)	--	GND	---	---	---	---
58	LECHA	I	Input terminal for Composite video signal.(White level)	---	---	---	---
59	20M.START(H)	I	Switching terminal for stertring Mode.(High speed/Low speed)	---	---	---	---
60	MD0	I	Mode setting terminal for flash over-write.	---	---	---	---
61	CVOUT	O	Output terminal for CG Video.	---	---	---	---
62	HLF	O	LPF connecting terminal for the slicer. (For OSD dot clock.)	---	---	---	---
63	SECAM.V.IN	I	Chrominance input terminal for SECAM super impose.	---	---	---	---
64	GND	--	Connect to GND	In	In	In	In
65	S TAB(L)	I	Input terminal for the prevention tab. [EXIST] :LOW [NO EXIST] :HIGH	In	In	In	In
66	UNLOADING(H)	O	Control terminal for loading motor. [Reverse rotation / brake] : "High"	Low	Low	Low	Low
67	LOADING(H)	O	Control terminal for loading motor. [forward rotation / brake] : "High"	Low	Low	Low	Low
68	C.SYNC	I	Input terminal for composite V-sync signal.	In	In	In	In
69	EX.FF/REW(L)	I	Filter control terminal for PB-CTL signal in FF/REW.	Low	Low	Low	Low
70	PAL-I/BG/DK(SYS4)	O	Output terminal for TV broadcast system switching signal for video circuit control.	Not fix	Low	Low	Low
71	SECAM/PAL(SYS2)	O	Output terminal for TV broadcast system switching signal for video circuit control.	Not fix	Low	Low	Low
72	SLEEP(L)	O	Output terminal for super power save mode setting. P-OFF in the super power save mode..... "Low".	High	Low	Low	High
73	PB60Hz(H)	O	Switching terminal for NTSC FM Audio trap filter in PB. [VV (PB,Trick_PB/A-DUB, A-DUB-PS) mode and CTL is 60Hz] : "High" [Other than above condition] : "Low"	Low	Low	Low	Low
74	ADUB(H)	O	Switching terminal for Bias oscillation noise filter in A-DUB mode. [ADUB/ADUB-PS(Including Assemble/syncro/AV-Insert)] : "High" [Other than above condition] : "Hi-Z"	Hi-Z	Hi-Z	Hi-Z	Hi-Z
75	N.C(VBI1)	--	Fix to Low.	Low	Low	Low	Low
76	P FAIL	I	Input terminal for Interrupt signal for power fail detection.	In	In	In	In
77	IR	I	Input terminal for Interrupt signal from IR sensor emitted by Remo-Con.	In	In	In	In
78	P50 OUT	O	Output terminal for Project 50 serial data.	Not fix	Low	Low	Low
79	CAP.ET	O	Output terminal for Capstan Torque command.	0V	0V	Low	0V
80	CYL.ET	O	Output terminal for Cylinder Torque command.	4.213V	4.213V	Low	4.213V
81	DIGI.LINK	O	Control signal for switching IR sensor.[only LOEWE model]	Low	Low	Low	Low
82	HALF_WAVE(H)	O	Switching terminal for capstan driver speed mode.(FAST/SLOW)	In	In	In	In
83	CAP.R/F	O	Switching terminal for capstan motor rotating direction.	Low	Low	Low	Low
84	125Hz	O	125Hz pulse output terminal for clock adjustment.	Not fix	Low	Low	Low
85	SHORT_DN	I	Short Circuit detection terminal for oscillation circuit in REC. *When the "BIAS(H)" is "Low" and this terminal is "High", "F08" is displayed. *When the "BIAS(H)" is "High" and this terminal is "low", "F07" is displayed.	In	In	In	In
86	N.C	--	Fix to Low.	Low	Low	Low	Low
87	N.C	--	Fix to Low.	Low	Low	Low	Low
88	N.C	--	Fix to Low.	Low	Low	Low	Low
89	FLD/T2 CLK	O	Serial clock output terminal for FIP driver and TEST_2(Factory use).	Not fix	Low	Low	Low
90	FLD/T2 DATA IN	I	Serial data input terminal for FIP driver and TEST_2(Factory use).	Not fix	In	In	In

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
91	FLD/T2 DATA OUT	O	Serial data output terminal for FIP driver and TEST_2(Factory use).	Not fix	Low	Low	Low
92	FLD_CS	O	Chip select terminal for FIP driver.	Not fix	Low	Low	Low
93	T.REEL.PULSE	I	Input terminal for Take-up Reel sensor pulse.	In	In	In	In
94	S.REEL.PULSE	I	Input terminal for Supply Reel sensor pulse.	In	In	In	In
95	DAVN	I	DAVN signal from Slicer	In	In	In	In
96	EEP_WR	O	Write enable for EEPROM H:READ only L:Write	High	High	Low	High
97	OSD IIC CLK	O	IIC clock for EEPROM,I/O and slicer	Not fix	Low	Low	Low
98	OSD IIC DATA	I/O	IIC data for EEPROM,I/O and slicer	Not fix	Low	Low	Low
99	MAIN IIC CLK	O	IIC clock for AV1CHIP,FM audio,Tuner,Decoder and RFC	Not fix	Low	Low	Low
100	MAIN IIC DATA	I/O	IIC data for AV1CHIP,FM audio,Tuner,Decoder and RFC	Not fix	Low	Low	Low
101	N.C	--	Low fix terminal.	Low	Low	Low	Low
102	N.C	--	Low fix terminal.	Low	Low	Low	Low
103	FG.AMP.OUT	O	Output from internal FG Amplifier	---	---	---	---
104	FG.AMP.IN	I	Input for internal FG Amplifier	---	---	---	---
105	GND(A)	--	GND	---	---	---	---
106	GND	--	GND	---	---	---	---
107	PFG	I	Cylinder PG/FG input terminal	---	---	---	---
108	OREF	O	Output from internal reference voltage (2.5V)	---	---	---	---
109	IREF	I	Input for internal reference voltage	---	---	---	---
110	to GND	--	Connect to GND	---	---	---	---
111	CTL.HEAD(-)	I	Input signal from CTL HEAD(+)	---	---	---	---
112	CTL.HEAD(+)	I	Input signal from CTL HEAD(-)	---	---	---	---
113	CTL.AMP.REF	I	Input for internal CTL amplifier reference voltage	---	---	---	---
114	PB.CTL.OUT	O	Output from internal CTL amplifier	---	---	---	---
115	+5V(A)	I	5V input terminal	---	---	---	---
116	+5V(AD)	I	5V input terminal	---	---	---	---

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT						
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector		
OFF	---	---	---	---	---	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
VPS STAND BY	EXT or TIMER1	---	---	L	NO.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						C+.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In	
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
or Personal Planner Standby	TIMER2	---	---	L	AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In	
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
		---	---	L	AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						SAT.NO	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In	
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
		---	---	L	SAT.C+	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						H	NO.TU	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In		
		---	---	L	C+.TU	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In		
						M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In		
						AV1	L	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In	
						M/H	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In		
		---	---	L	AV2	L	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In		
						M/H	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In		
						AV3	L	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In	
						M/H	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In		
		---	---	L	SAT.NO	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In		
						M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In		
						SAT.C+	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In	
						M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In		
	DECODER	---	---	L	NO.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						C+.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In	
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
		---	---	L	AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In	
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
		---	---	L	AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						SAT.NO	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In	
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
		---	---	L	SAT.C+	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In		
						H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In		
		---	---	L	C+.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In		
						AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In	
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In		
		---	---	L	AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In		
						AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In	
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In		
		---	---	L	SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In		
						SAT.C+	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In	
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In		

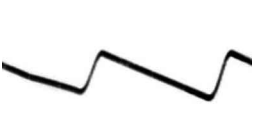
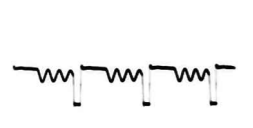
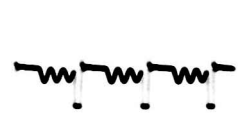
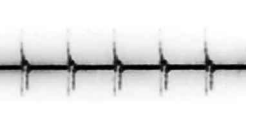
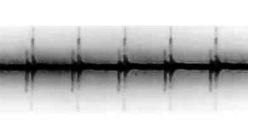
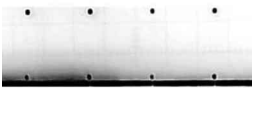
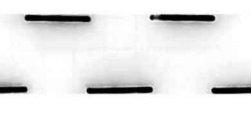
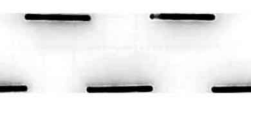
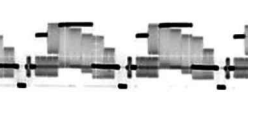
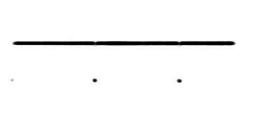
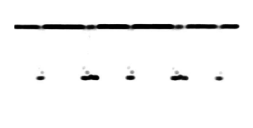
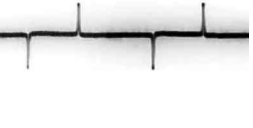
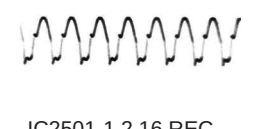
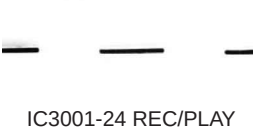
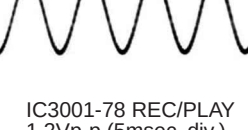
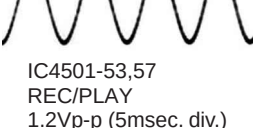
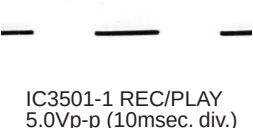
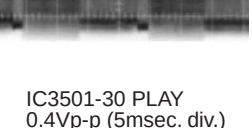
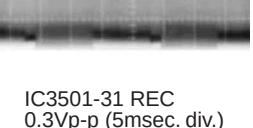
		INPUT CONDITION				VIDEO OUTPUT RESULT								AUDIO OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector	
P.ON	EXT or TIMER1 or TIMER2	TV	EE	L	NO.TU	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					AV1	---	VCR out	VCR out	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL	
					AV2	---	VCR out	VCR out	L	L	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL	
					AV3	---	VCR out	VCR out	L	L	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL	
				SAT.NO	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL		
				SAT.C+	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL		
				H	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL	
		AV2	---		VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL			
		AV3	---		VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL			
		SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL				
		SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL				
		VTR	EE	L	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL	
					AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL	
					AV2	L	VCR out	VCR out	H	H	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL	
				M/H	VCR out	VCR out	M/H	M/H	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL			
	AV3			---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL			
	SAT.NO			---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL			
	SAT.C+			---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL			
	H	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN	INSEL			
		C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL				
P.ON		EXT	VTR	EE	H	AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
						AV2	---	VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
	AV3					---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL	
	SAT.NO					---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL	
	SAT.C+					---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL	
	VV				---	NO.TU	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	TUN	INSEL
					C+.TU	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	PB	TUN	INSEL
					AV1	---	VCR out	VCR out	M/H	M/H	OFF	AV1	PB	PB	PB	PB	PB	AV1 In	INSEL
					AV2	---	VCR out	VCR out	M/H	M/H	OFF	AV2	PB	PB	PB	PB	PB	AV2 In	INSEL
					AV3	---	VCR out	VCR out	M/H	M/H	OFF	AV3	PB	PB	PB	PB	PB	AV3 In	INSEL
	SAT.NO		---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	PB	SAT	INSEL			
	SAT.C+		---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	PB	SAT	INSEL			
DECODER	TV	EE	L	NO.TU	L	VCR out	AV1 In	L	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In		
					M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	TUN	AV2 In	AV1 In		
				C+.TU	L	VCR out	TUN IN	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN		
					M/H	VCR out	TUN IN	L	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN		
				AV1	L	VCR out	AV1 In	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In		
					M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In		
				AV2	L	VCR out	AV1 In	L	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In		
					M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In		
				AV3	L	VCR out	AV1 In	L	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In		
					M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	AV3 In	AV2 In	AV1 In		
				SAT.NO	L	VCR out	AV1 In	L	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In		
					M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	SAT	AV2 In	AV1 In		
				SAT.C+	L	VCR out	SAT IN	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	TUN		
					M/H	VCR out	SAT IN	L	L	OFF	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	TUN		
			H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In		
					M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In		
				C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN		
					M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN		
				AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In	
				AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In	
				AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In	
				SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In		
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In	
				SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT		
						M/H	VCR out	SAT IN	H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT	

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
P.ON	DECODER	VTR	EE	L	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	M/H	L	ON	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	M/H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	H	L	OFF	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
			VV	---	NO.TU	L	VCR out	AV1 In	M/H	L	OFF	TUN	PB	PB	AV1 In	PB	TUN	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	TUN	PB	PB	AV1 In	PB	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	M/H	L	OFF	TUN	PB	PB	TUN	PB	TUN	TUN
						M/H	VCR out	TUN IN	M/H	L	OFF	AV2	PB	PB	TUN	PB	AV2 In	TUN
					AV1	L	VCR out	AV1 In	M/H	L	OFF	AV1	PB	PB	AV1 In	PB	AV1 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	M/H	L	OFF	SAT	PB	PB	AV1 In	PB	SAT	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	SAT	PB	PB	AV1 In	PB	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	M/H	L	OFF	SAT	PB	PB	SAT	PB	SAT	SAT
						M/H	VCR out	SAT IN	M/H	L	OFF	AV2	PB	PB	SAT	PB	AV2 In	SAT

NOTE: NO.TU: Tuner position, DECODER OFF (e.g. ARD)
C+.TU: Tuner position, DECODER ON (e.g. PREMI)
*[M/H] :In case of Personal Planner standby(not External Link), AV1 PB must not output 'M' or 'H'

RGB SW : OFF = HIGH, ON=LOW
EE : Non-Playback signal
VV:Playback signal

INPUT CONDITION						VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
OFF	---	---	---	---	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
PDC STAND BY	EXT	---	L	TUN	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
or	or	---	L	AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
Personal Planner Standby	or	---	L	AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
	or	---	L	AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
	TIMER2	---	L	SAT.TU	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
		---	H	TUN	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
		---	H	AV1	L	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
		---	H	AV2	L	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
		---	H	AV3	L	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
		---	H	SAT.TU	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
		---	L	TUN	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
		---	L	AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
		---	L	AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
		---	L	AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
		---	L	SAT.TU	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
		---	H	TUN	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
		---	H	AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
		---	H	AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
		---	H	AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
		---	H	SAT.TU	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In

 T1101-3 STOP 9.0Vp-p (2msec. div.)	 T1101-7 STOP 100Vp-p (5μsec. div.)	 IC1101-1 STOP 470Vp-p (5μsec. div.)	 IC1101-2 STOP 8.0Vp-p (10μsec. div.)	 IC1101-4 STOP 0.5Vp-p (10μsec. div.)
 IC1101-5 STOP 0.6Vp-p (10μsec. div.)	 IC6001-20 PAUSE 5.0Vp-p (10msec. div.)	 IC6001-21 REC 5.0Vp-p (10msec. div.)	 IC6001-24 REC 5.0Vp-p (10msec. div.)	 IC6001-61 REC 2.4Vp-p (20μsec. div.)
 IC6001-68 REC 5.0Vp-p (10msec. div.)	 IC6001-89 REC 5.0Vp-p (10msec. div.)	 IC6001-90,91 REC 5.0Vp-p (10msec. div.)	 IC6001-93,94 FF/REW 5.0Vp-p (1msec. div.)	 IC6001-97,98 REC 5.0Vp-p (10msec. div.)
 IC6001-99 REC 5.0Vp-p (10msec. div.)	 IC6001-100 REC 5.0Vp-p (10msec. div.)	 IC6001-107 REC 5.0Vp-p (10msec. div.)	 IC6001-111,112 REC 6.0Vp-p (10msec. div.)	 IC6001-114 PLAY 4.2Vp-p (10msec. div.)
 IC2501-1,2,16 REC 8.6Vp-p (5msec. div.)	 IC3001-2 REC 1.2Vp-p (5msec. div.)	 IC3001-4 PLAY 5.0Vp-p (5msec. div.)	 IC3001-14 REC 0.4Vp-p (5msec. div.)	 IC3001-15 PLAY 0.5Vp-p (20μsec. div.)
 IC3001-20 PLAY 150mVp-p (20μsec. div.)	 IC3001-24 REC/PLAY 5.0Vp-p (10msec. div.)	 IC3001-37 REC/PLAY 5.0Vp-p (5msec. div.)	 IC3001-38 REC/PLAY 5.0Vp-p (5msec. div.)	 IC3001-42,43 PLAY 0.4Vp-p (20μsec. div.)
 IC3001-48,50 REC 1.0Vp-p (20μsec. div.)	 IC3001-52 REC/PLAY 2.0Vp-p (20μsec. div.)	 IC3001-78 REC/PLAY 1.2Vp-p (5msec. div.)	 IC4501-9,14 REC 1.2Vp-p (5msec. div.)	 IC4501-21 REC 1.2Vp-p (5msec. div.)
 IC4501-53,57 REC/PLAY 1.2Vp-p (5msec. div.)	 IC3501-1 REC/PLAY 5.0Vp-p (10msec. div.)	 IC3501-30 PLAY 0.4Vp-p (5msec. div.)	 IC3501-31 REC 0.3Vp-p (5msec. div.)	

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

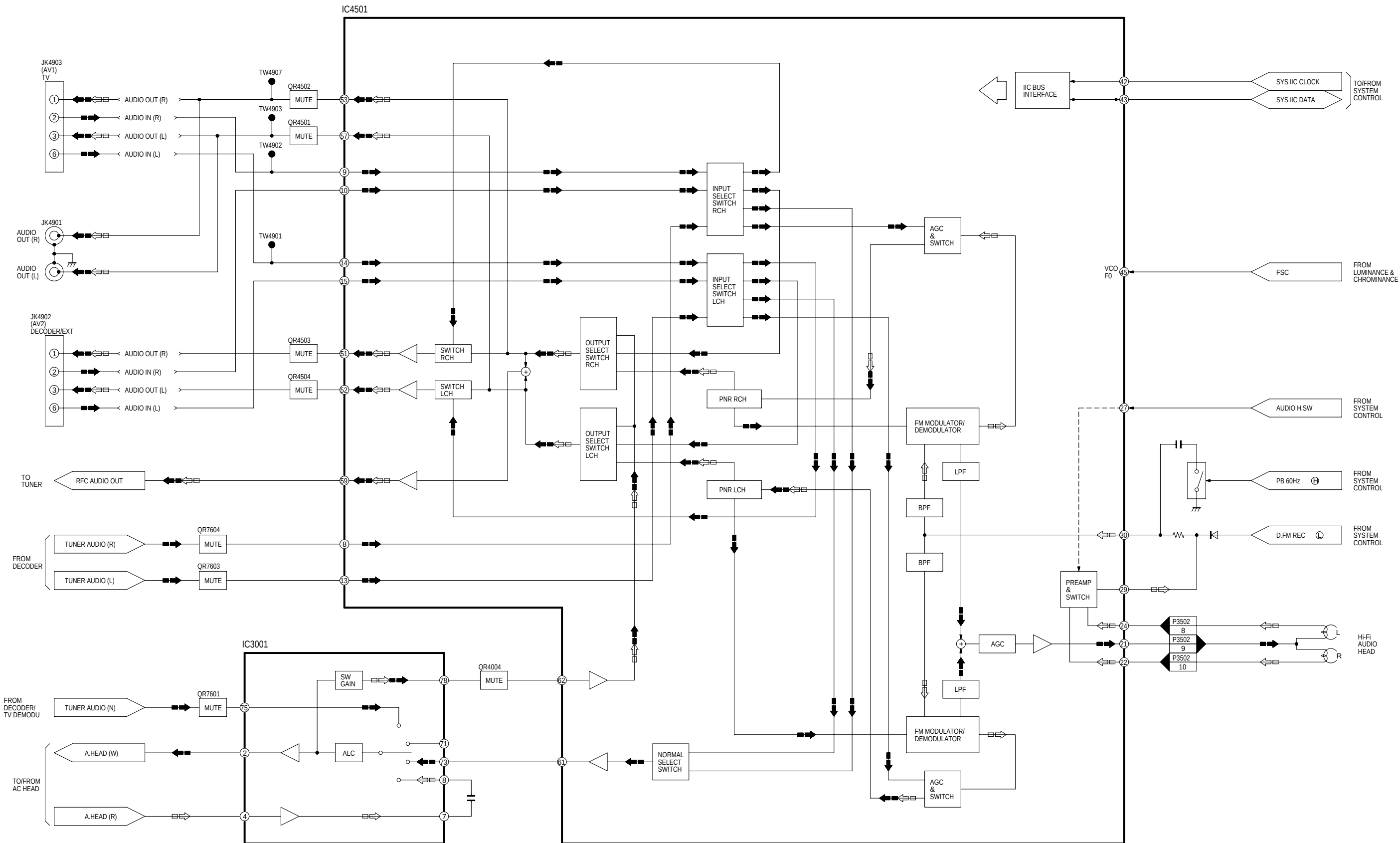
Ref. No. MODE	IC1501								IC1502											
	1	2	3	4					1	2	3	4								
STOP	1.2	2.3	4.9	0.0					0.0	1.2	4.9	0.0								
PLAY	1.2	2.3	4.2	0.0					0.0	1.2	4.9	0.0								
REC	1.2	2.3	4.8	0.0					0.0	1.2	4.8	0.0								
F.F	1.2	2.3	2.2	0.0					0.0	1.2	2.4	0.0								
REW	1.2	2.3	2.4	0.0					0.0	1.2	2.3	0.0								
Ref. No. MODE	IC2501																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	16.8	16.8	16.8	4.9	4.9	1.2	1.1	0.0	2.7	1.5	0.0	4.1	4.1	3.7	0.0	16.8				
PLAY	14.9	14.9	15.2	1.1	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	14.9				
REC	15.1	15.1	15.4	1.0	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	15.1				
F.F	14.4	14.4	14.6	1.0	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	14.7				
REW	14.3	14.3	14.6	1.1	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	14.9				
Ref. No. MODE	IC6001																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.0	1.9	0.0	0.0	3.5	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.9	4.7	4.1	0.0	4.9	0.0	0.0	0.0
PLAY	4.7	1.8	0.0	0.0	3.9	0.0	0.0	0.0	2.4	0.0	4.3	4.9	4.9	4.6	0.1	0.0	0.0	0.0	0.0	0.0
REC	4.7	1.9	0.0	0.0	2.2	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.8	4.6	4.0	0.0	0.0	0.0	4.9	0.0
F.F	4.9	1.8	0.0	0.0	3.5	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.8	4.8	4.1	0.0	4.9	0.0	0.0	0.0
REW	4.9	1.8	0.0	0.0	3.4	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.9	4.6	4.1	0.0	4.9	0.0	0.0	0.0
Ref. No. MODE	IC6001																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0.0	0.0	2.5	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	0.0	0.0	4.9
PLAY	2.4	0.0	4.9	2.4	2.4	4.8	0.0	0.0	0.0	0.0	-	-	4.9	0.0	1.5	3.0	4.9	0.0	0.0	4.9
REC	2.4	0.0	4.8	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	4.9	4.9	0.0
F.F	0.0	0.0	0.0	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	0.0	0.0	4.9
REW	0.0	0.0	0.0	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	0.0	0.0	4.9
Ref. No. MODE	IC6001																			
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.0	0.0	5.0	4.9	0.0	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.4	4.9	0.0
PLAY	0.0	0.0	5.0	4.9	0.0	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.4	4.9	0.0
REC	0.0	4.9	5.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	4.9	4.9	1.5	2.1	4.8	1.9	0.0	2.4	4.9	0.0
F.F	0.0	0.0	5.0	4.9	4.9	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.5	4.9	0.0
REW	0.0	0.0	5.0	4.9	4.9	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.4	4.9	0.0
Ref. No. MODE	IC6001																			
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	4.9	4.9	0.0	0.0	0.0	5.2	5.2	0.0	0.0	2.7
PLAY	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.4	2.4
REC	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.4	2.4
F.F	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	1.6	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.9	2.4
REW	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	1.6	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.9	2.4
Ref. No. MODE	IC6001																			
	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	4.9	4.9	4.9	4.9	4.8	4.8	4.1	4.1
PLAY	0.0	0.4	0.0	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	4.1	4.8	4.9	4.9	4.8	4.8	4.2	4.1
REC	0.0	0.4	0.0	0.0	4.5	0.0	0.0	0.0	4.9	4.9	4.9	2.4	4.2	4.8	4.9	4.9	4.8	4.8	4.1	4.0
F.F	0.0	4.8	0.0	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	2.3	2.3	4.9	4.9	4.8	4.8	4.2	4.1
REW	0.0	4.8	4.9	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	2.2	2.3	4.9	4.9	4.8	4.8	4.2	4.1
Ref. No. MODE	IC6001																			
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116				
STOP	0.0	0.0	2.5	2.5	0.0	0.0	4.9	2.5	2.5	0.0	2.5	2.5	2.5	2.5	4.9	4.9				
PLAY	0.0	0.0	2.5	2.5	0.0	0.0	1.1	2.5	2.5	0.0	2.5	2.5	2.5	2.5	4.9	4.9				
REC	0.0	0.0	2.4	2.4	0.0	0.0	1.0	2.4	2.4	0.0	1.9	2.3	2.5	2.5	4.9	4.9				
F.F	0.0	0.0	2.5	2.5	0.0	0.0	1.0	2.5	2.5	0.0	2.5	2.5	2.5	2.5	5.0	5.0				
REW	0.0	0.0	2.5	2.5	0.0	0.0	1.1	2.5	2.5	0.0	2.5	2.5	2.5	2.5	5.0	5.0				
Ref. No. MODE	IC7701																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.5	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
PLAY	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	3.0	0.0	3.1	0.0	3.5	3.1	1.5	1.3	0.0	4.9	4.9
REC	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.4	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
F.F	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.5	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
REW	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.5	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
Ref. No. MODE	IC7702																			
	1	2	3	4	5	6	7	8												
STOP	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
PLAY	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
REC	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
F.F	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
REW	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												

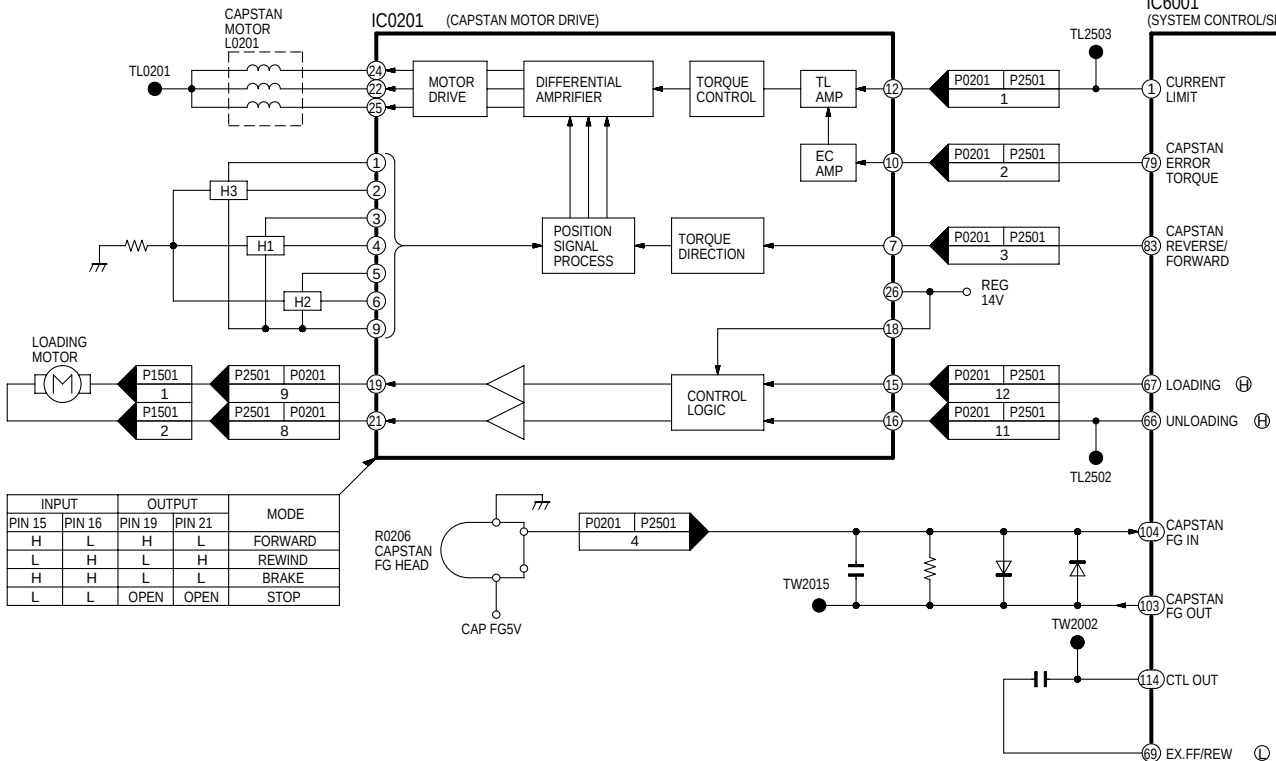
SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

Ref. No. MODE	Q1501			Q1502			Q7701			Q7702			Q7703			
	+	-		+	-		E	C	B	E	C	B	E	C	B	
STOP	4.7	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.6	
PLAY	4.7	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.6	
REC	4.6	0.0		4.8	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.5	
F.F	4.7	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.5	
REW	4.9	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.5	
Ref. No. MODE	Q7704			Q7705			QR6001			QR6006						
STOP	0.0	4.2	0.0	1.2	4.9	1.9	0.0	0.0	4.9	0.0	0.0	4.9				
PLAY	0.0	4.2	0.0	1.3	4.9	1.9	0.0	12.3	0.0	0.0	0.0	4.8				
REC	0.0	4.2	0.0	1.2	4.9	1.9	0.0	0.0	4.9	0.0	0.0	4.8				
F.F	0.0	4.2	0.0	1.2	4.9	1.9	0.0	0.0	4.9	0.0	0.0	4.8				
REW	0.0	4.2	0.0	1.2	4.9	1.9	0.0	0.0	4.9	0.0	0.0	4.8				

←■ MAIN SIGNAL PATH IN REC MODE

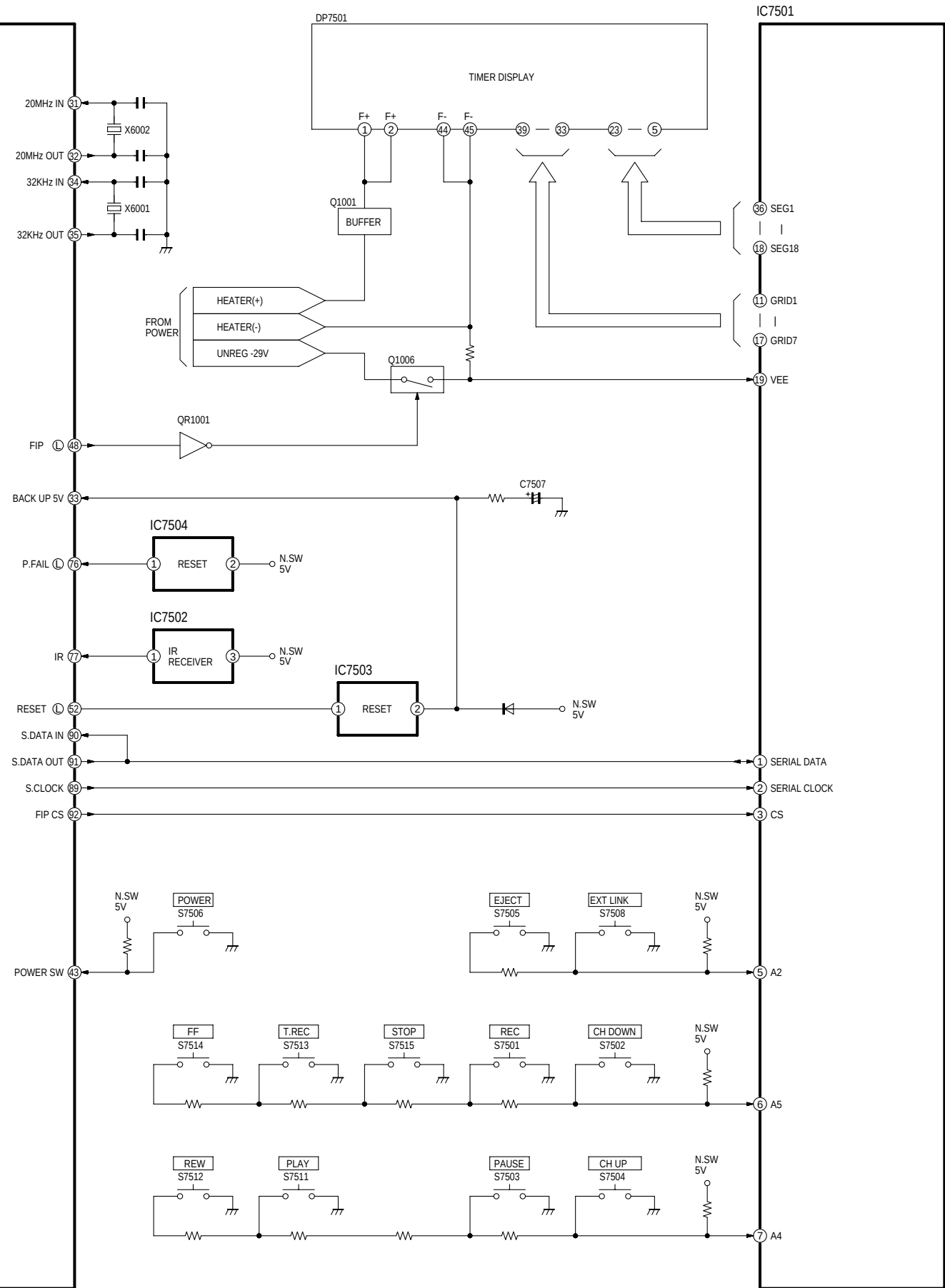
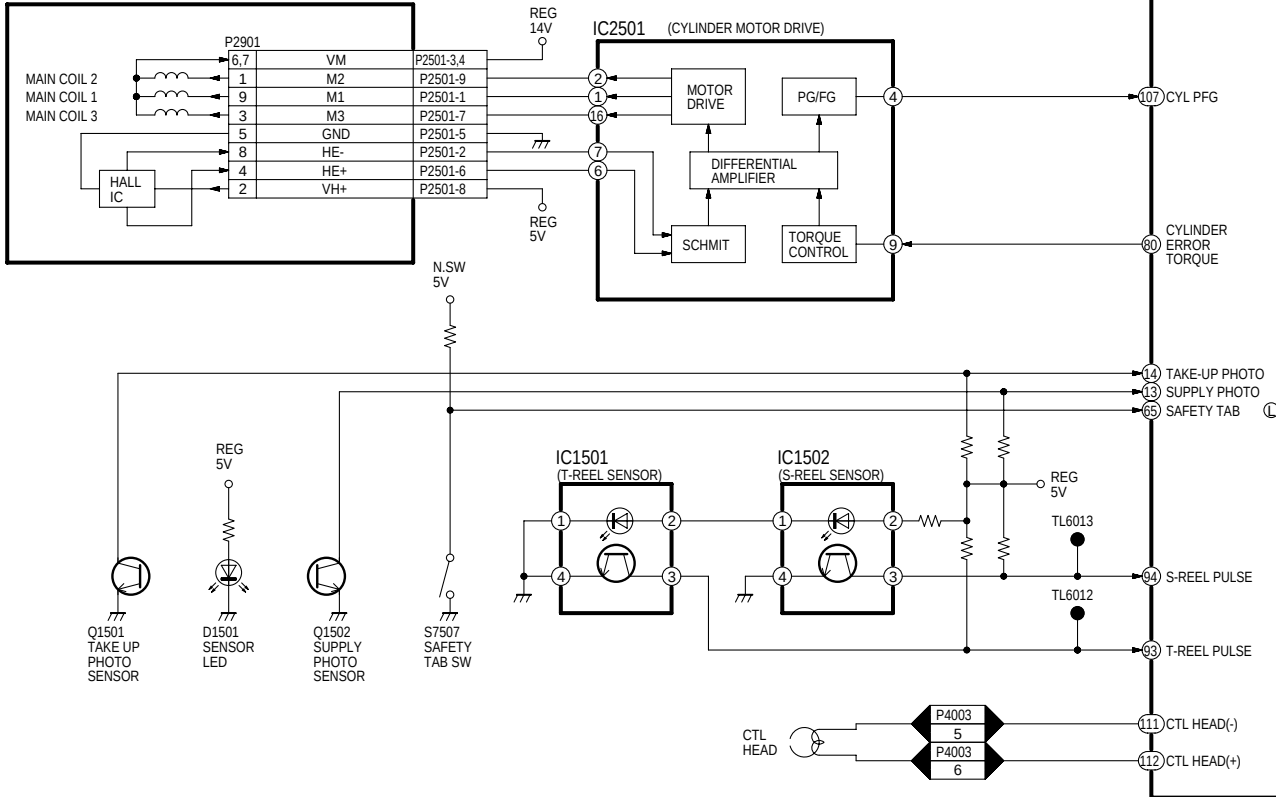
←□ MAIN SIGNAL PATH IN PLAYBACK MODE





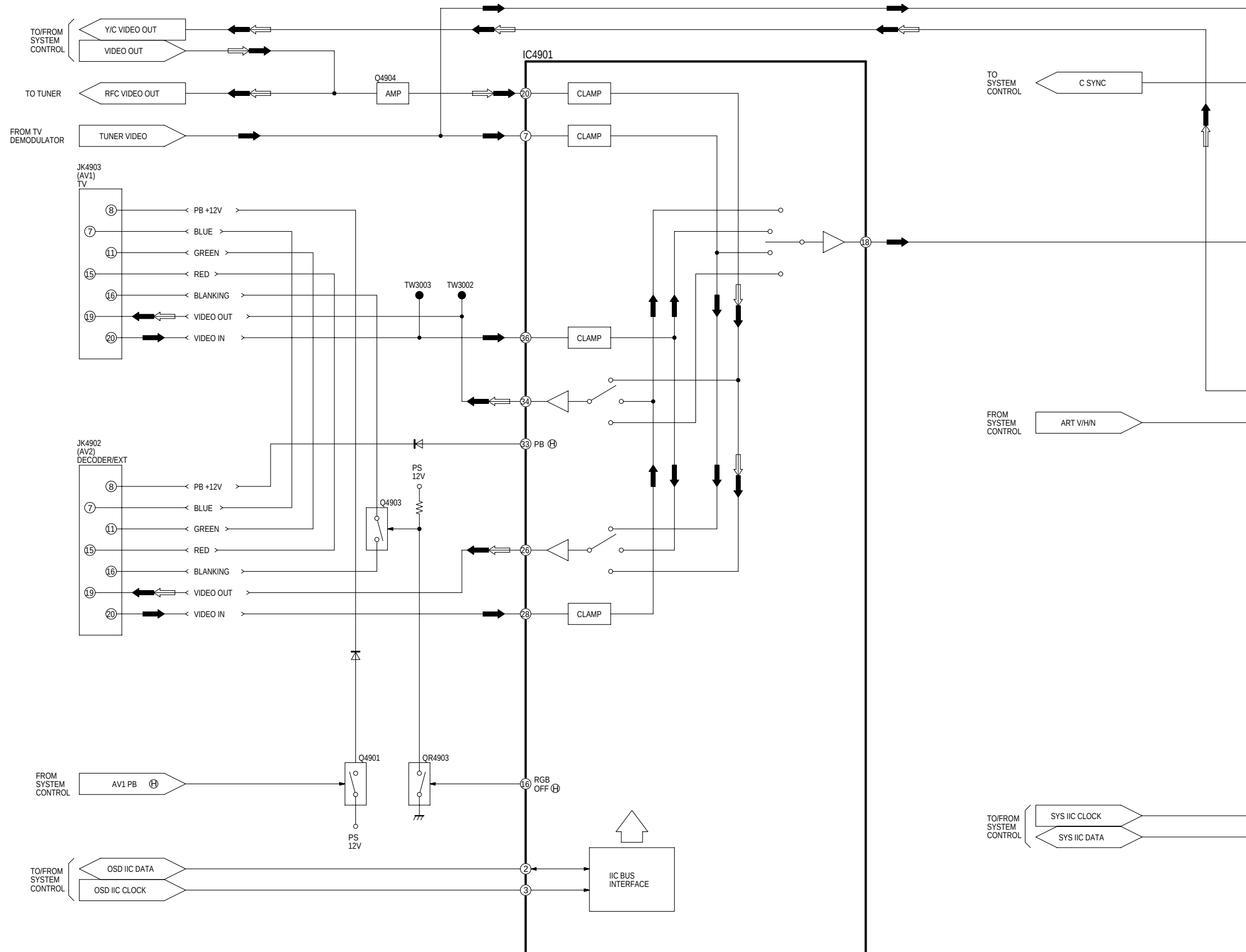
INPUT		OUTPUT		MODE
PIN 15	PIN 16	PIN 19	PIN 21	
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE
L	L	OPEN	OPEN	STOP

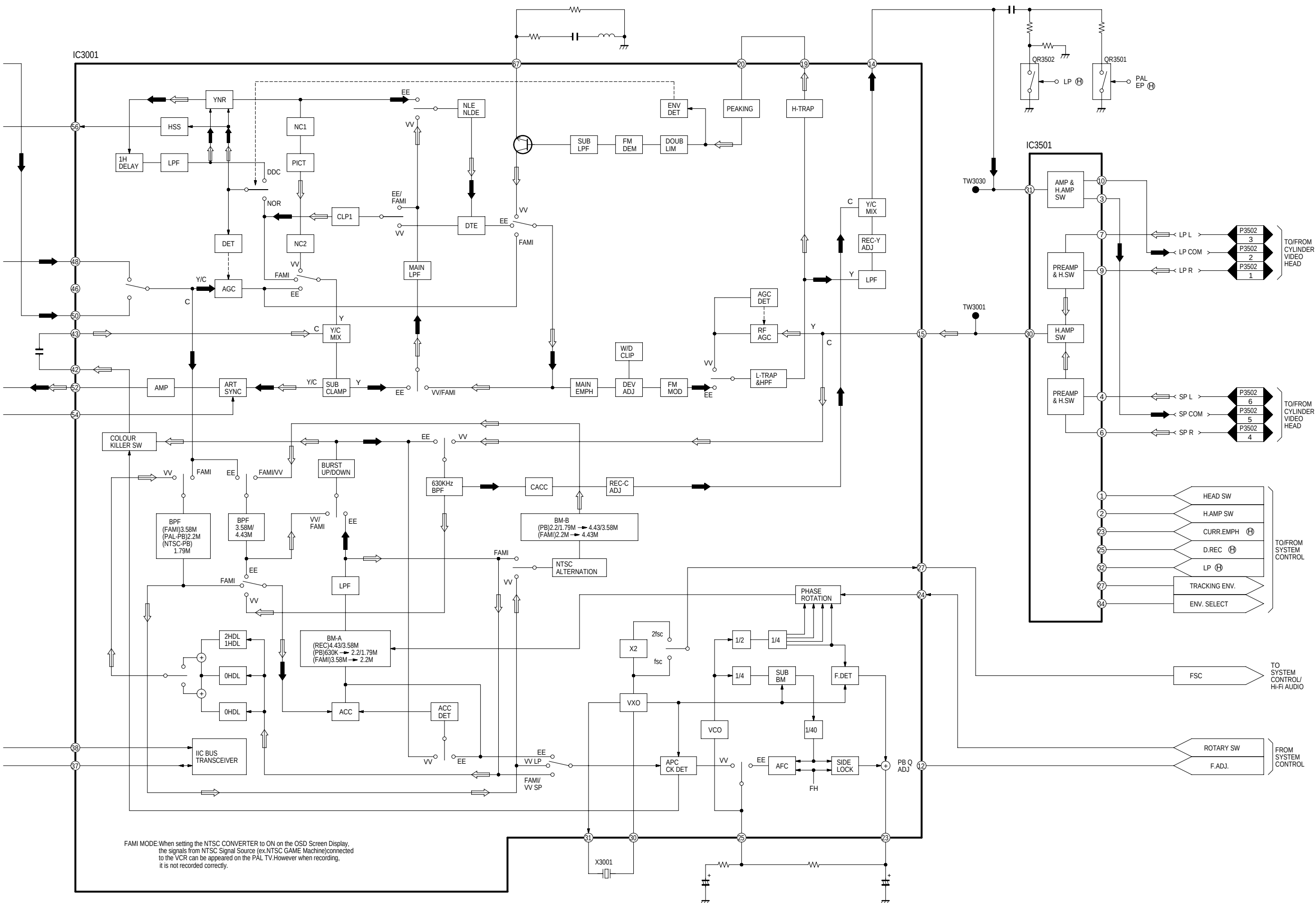
CYLINDER STATOR UNIT



← MAIN SIGNAL PATH IN REC MODE

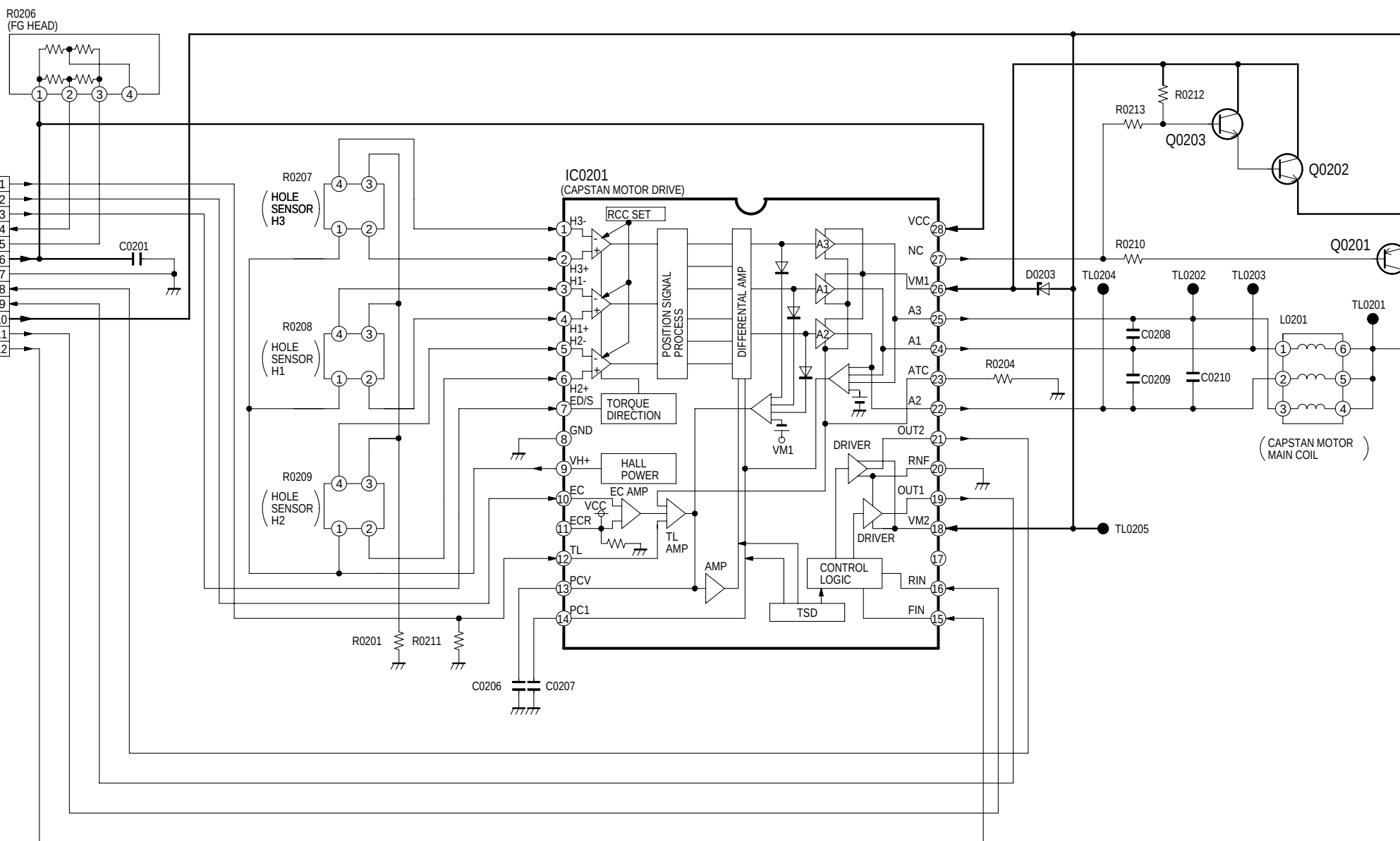
← MAIN SIGNAL PATH IN PLAYBACK MODE





TO SYSTEM CONTROL & SERVO
SECTION P2501(F-21)

P0201	CURR LIMIT	1
	CAP ET	2
	CAP ED/S	3
	CAP FG1	4
	GND (FG)	5
	REG 5V	6
	GND (MOTOR)	7
	LOAD MOTOR (-)	8
	LOAD MOTOR (+)	9
	PS 14V	10
	UNLOADING (H)	11
	LOADING (H)	12



1

2

3

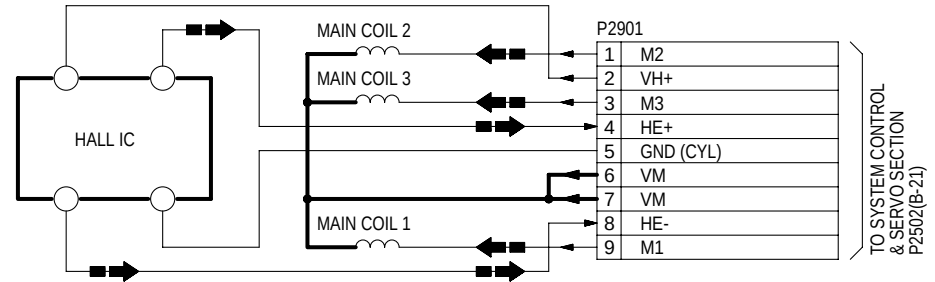
4

5

6

7

← CYLINDER SERVO SPEED LOOP



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

1

2

3

← AUDIO MAIN SIGNAL PATH IN REC MODE

↔ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

- (R) :TO POWER SUPPLY/R/F SECTION
(S) :TO SYSTEM CONTROL & SERVO SECTION
(V) :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
(I) :TO INPUT/OUTPUT SECTION
(T) :TO TIMER SECTION

- (S) D.FM REC (H)
(S) PB 60Hz (H)
(S) MUTE (H)
(S) SYS IIC CLOCK
(S) SYS IIC DATA
(V) FSC

- (I) AUDIO OUT2 (R)

- (I) AUDIO OUT2 (L)

- (I) AUDIO OUT1 (R)

- (I) AUDIO OUT1 (L)

- (T) P.FAIL MUTE

- (R) PS 12V
(R) PS 5V
(R) GND

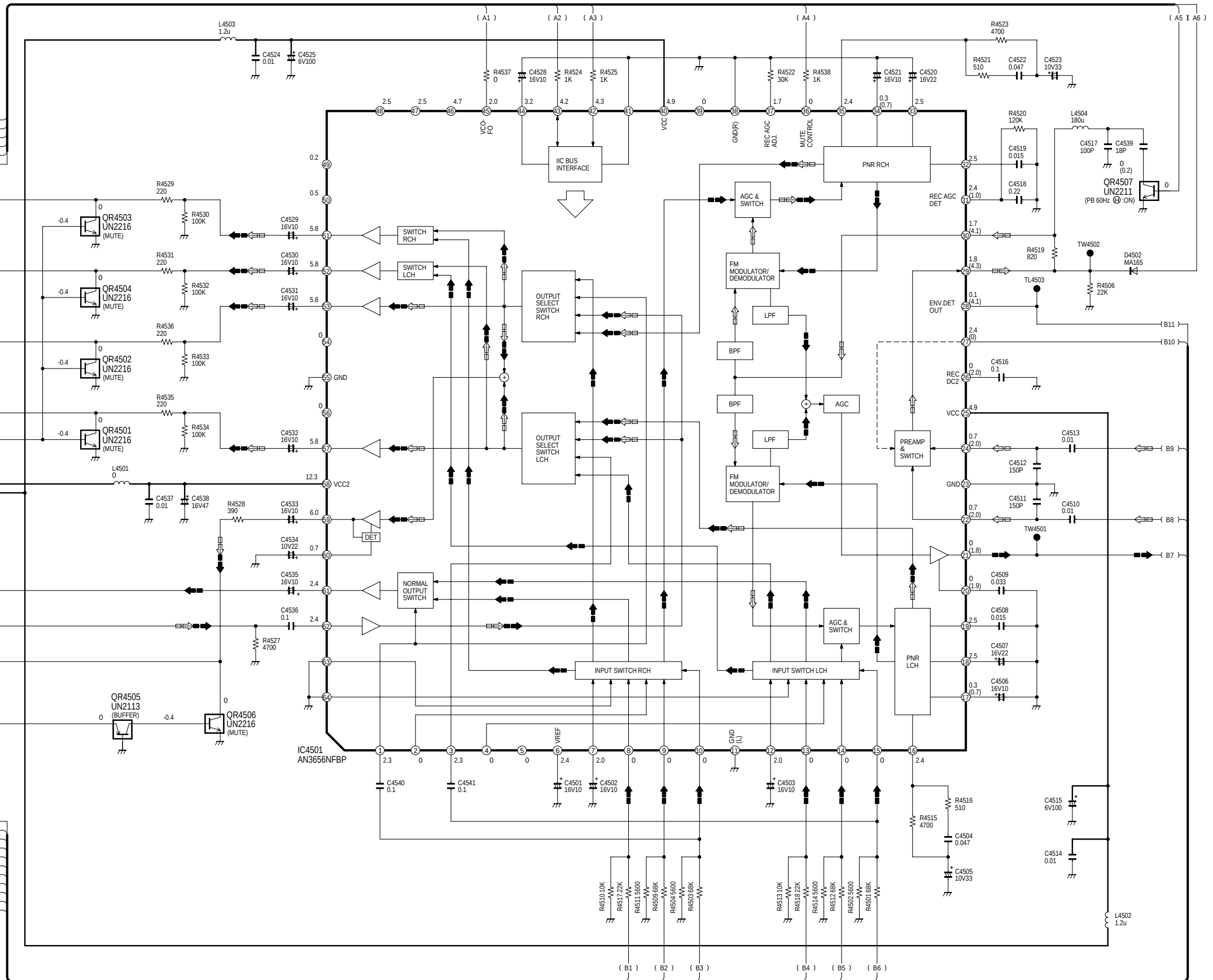
- (V) AUDIO IN (N)

- (V) AUDIO OUT (N)

- (R) RFC AUDIO OUT

- (S) AUDIO MUTE (H)

- (R) TUNER AUDIO (R)
(I) AUDIO IN1 (R)
(I) AUDIO IN2 (R)
(R) TUNER AUDIO (L)
(I) AUDIO IN1 (L)
(I) AUDIO IN2 (L)
(V) AUDIO HEAD COM
(V) AUDIO HEAD R
(V) AUDIO HEAD L
(S) A.HEAD SW
(S) ABS NORMAL (H)



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

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

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

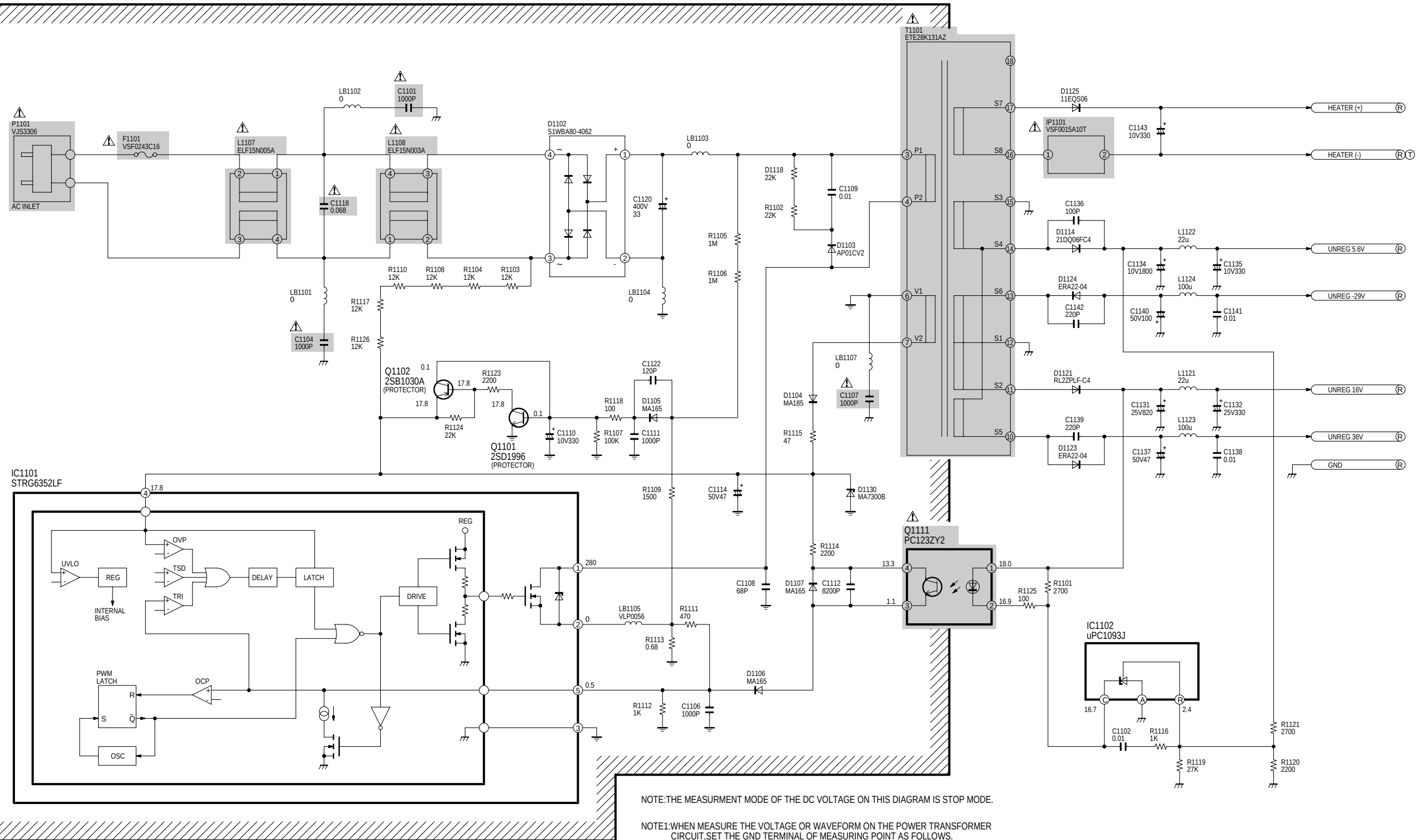


CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

(R) :TO POWER SUPPLY/RF SECTION
① :TO TIMER SECTION

HOT



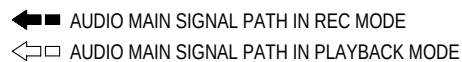
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK  HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

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

NOTE1: WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE: 
SECONDARY SIDE: ... 

NOTE2: THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

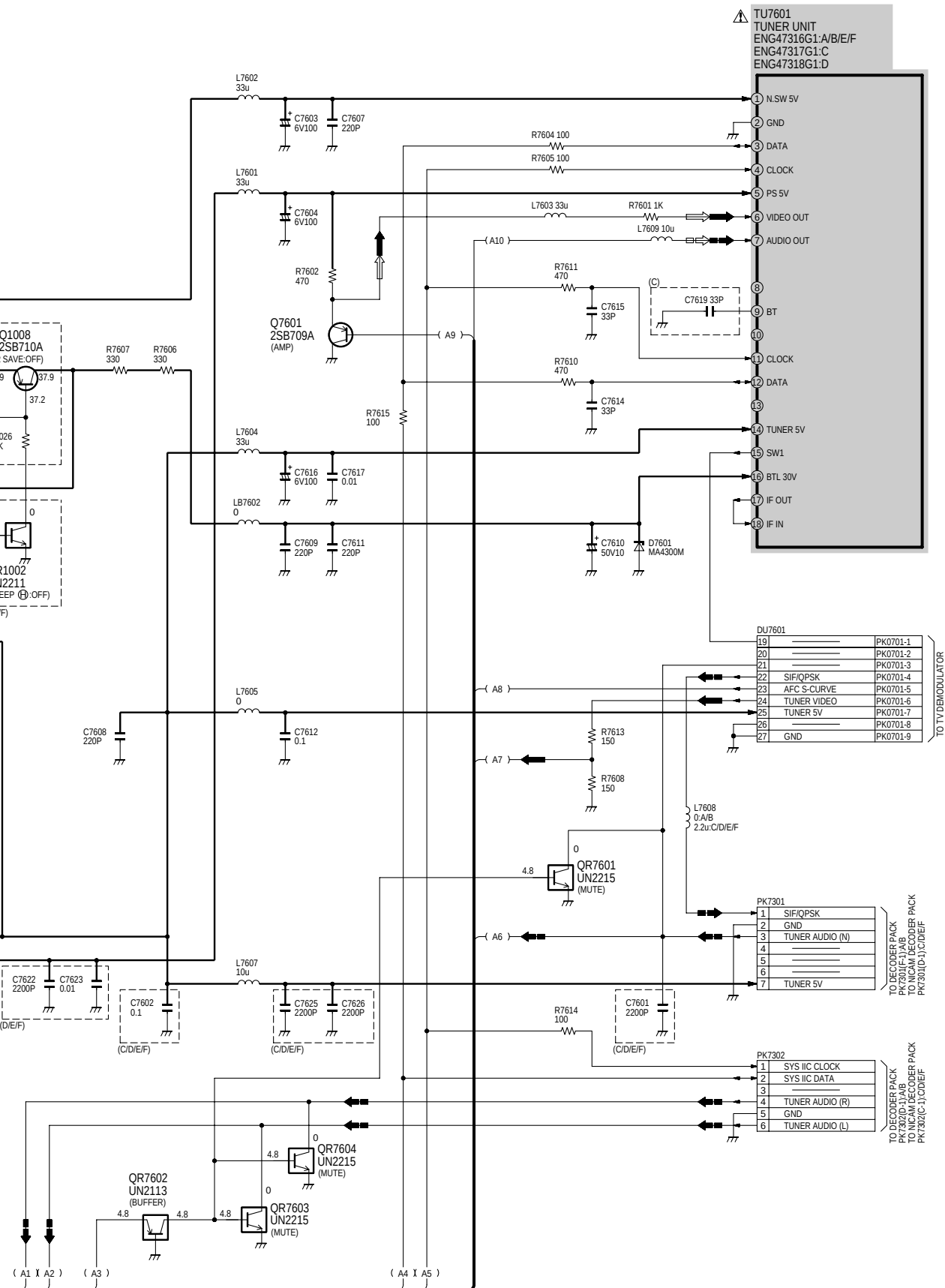
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.



-
- | Pin | Function | Signal Name |
|-----|-----------------|-------------|
| 1 | TUNER AUDIO (R) | A1 |
| 2 | TUNER AUDIO (L) | A2 |
| 3 | AUDIO DEF | A3 |
| 4 | SYS IIC DATA | A4 |
| 5 | SYS IIC CLOCK | A5 |
| 6 | TUNER AUDIO (N) | A6 |
| 7 | TUNER VIDEO | A7 |
| 8 | AFC S-CURVE | A8 |
| 9 | VIDEO OUT | A9 |
| 10 | RFC AUDIO OUT | A10 |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |



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



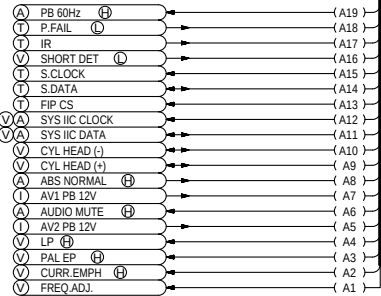
(R) :TO POWER SUPPLY/RF SECTION
(V) :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
(A) :TO HI-FI AUDIO SECTION
(I) :TO INPUT/OUTPUT SECTION
(T) :TO TIMER SECTION

← CAPSTAN SERVO SPEED LOOP

← CAPSTAN SERVO PHASE LOOP

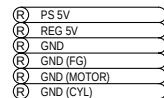
← CYLINDER SERVO SPEED LOOP

← CYLINDER SERVO PHASE LOOP

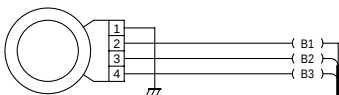


(V) TRACING ENV.

(R) AFC S-CURVE

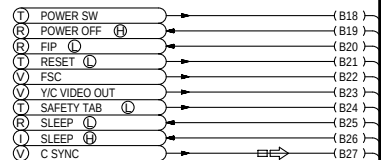
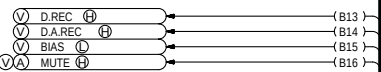
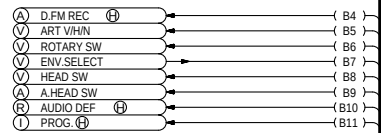


MODE SW
S1501
K0G934A-00002

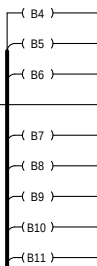
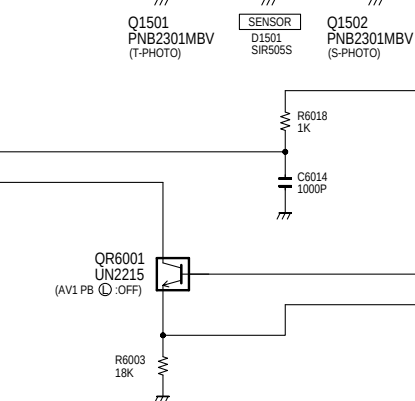


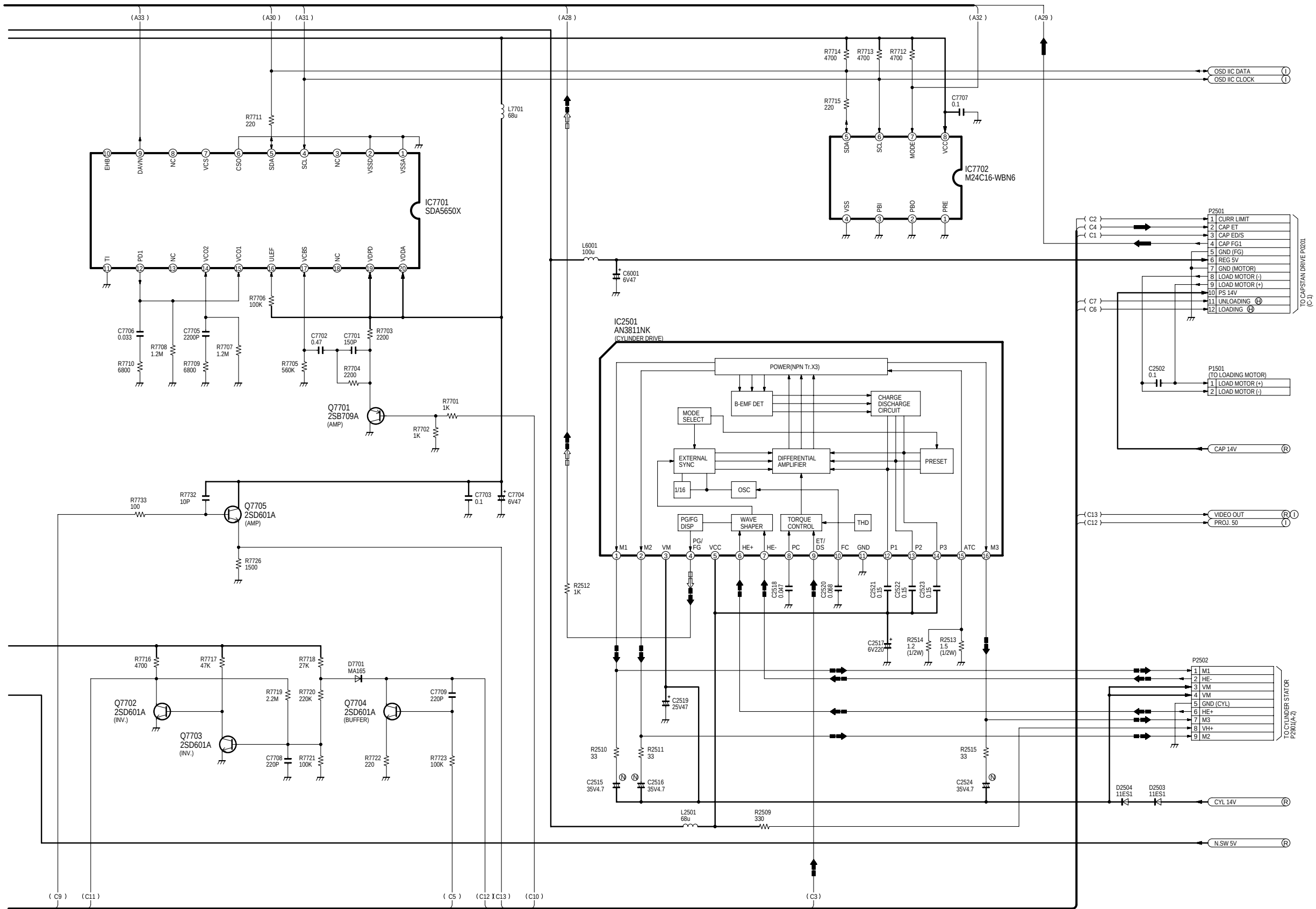
(V) HAMP SW

(I) AV1 PB (H)



(T) BACK UP 5V

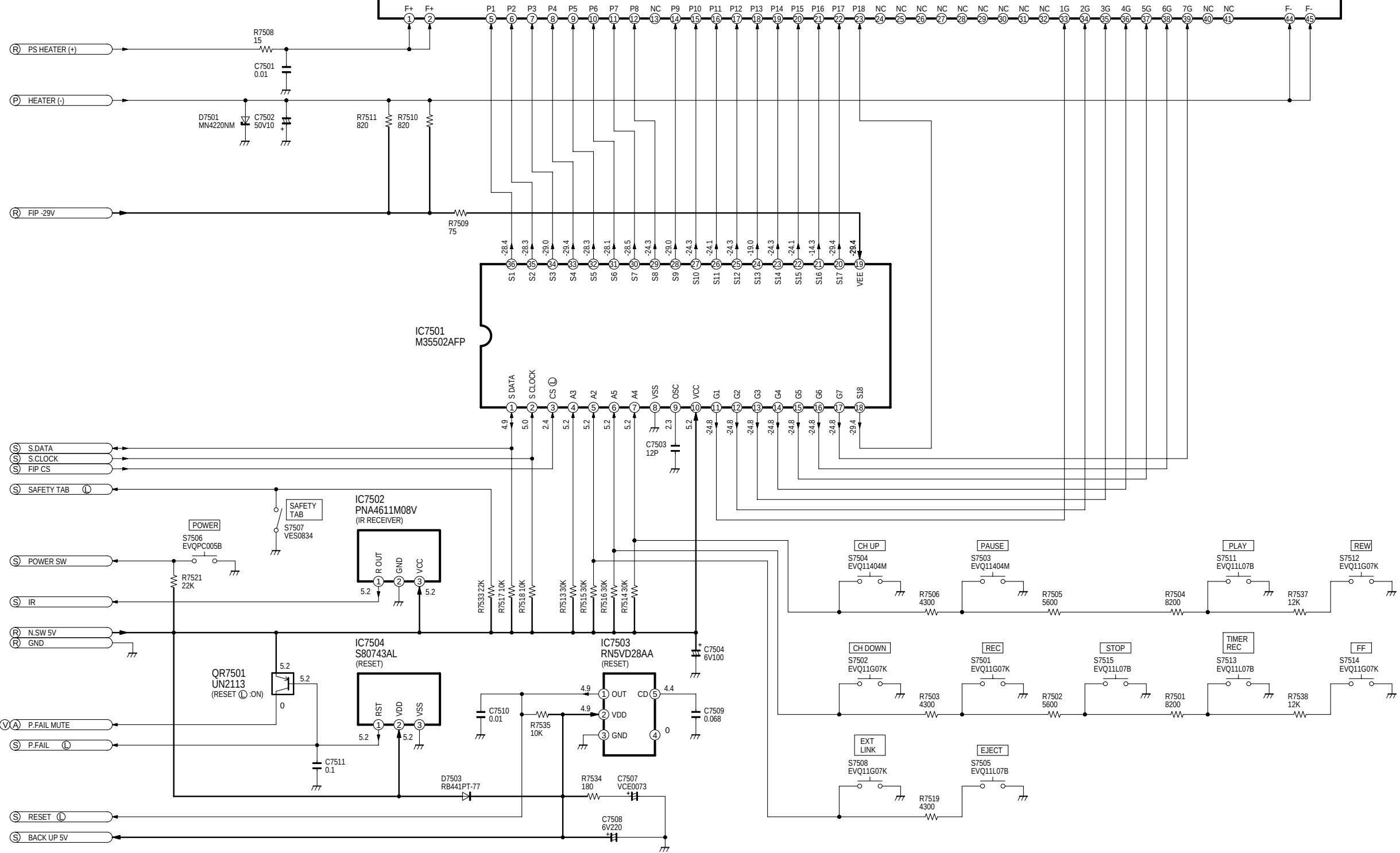
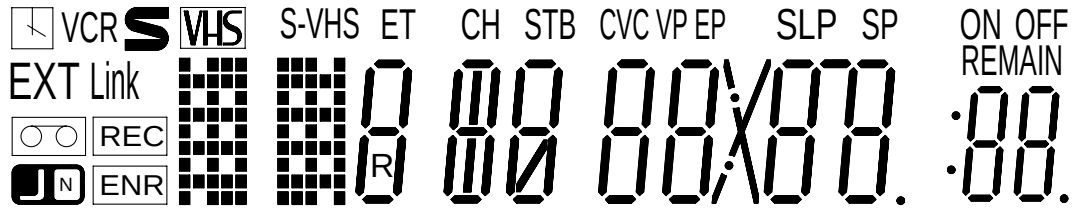




NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

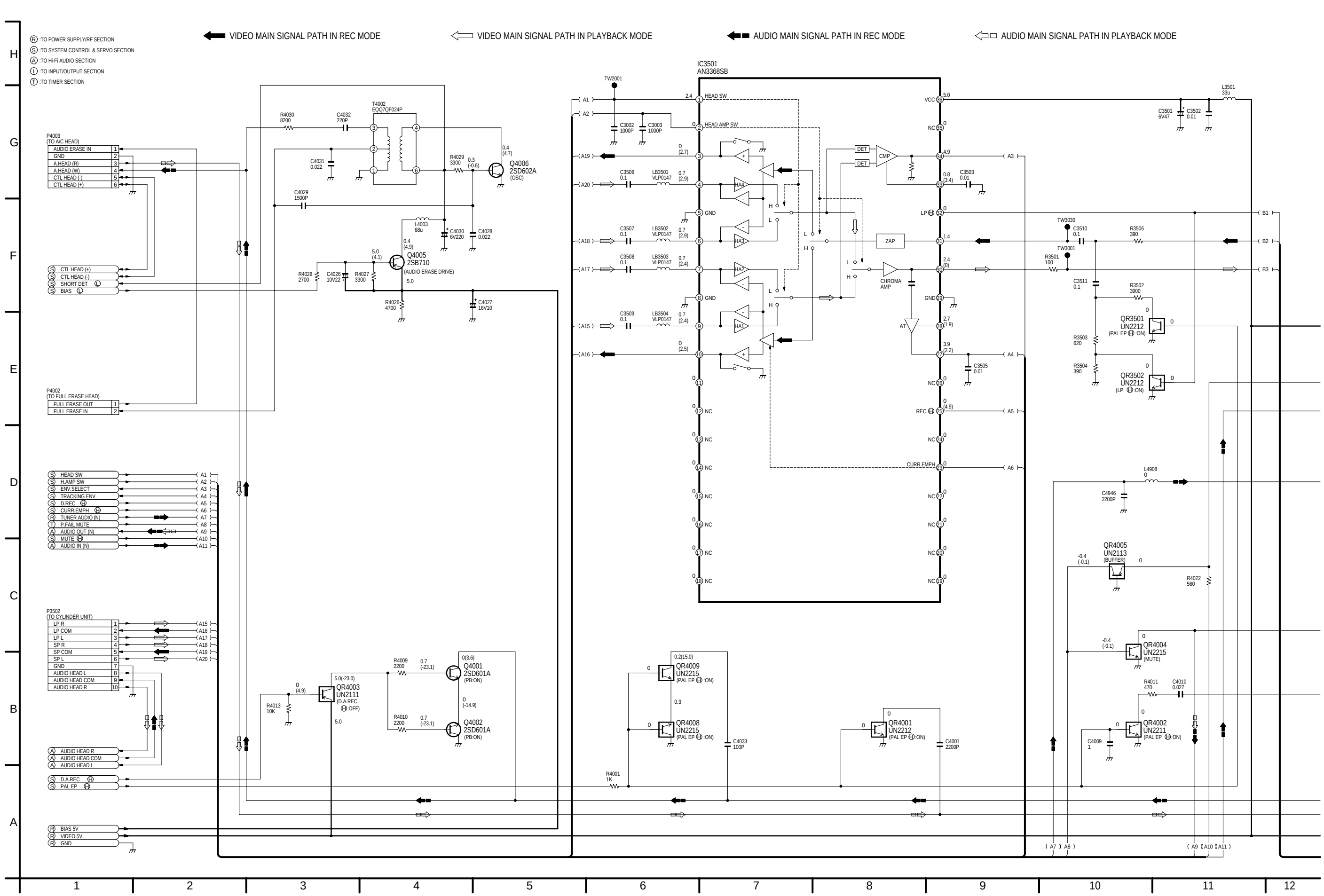
- (P) :TO POWER TRANSFORMER SECTION
- (R) :TO POWER SUPPLY/RF SECTION
- (S) :TO SYSTEM CONTROL & SERVO SECTION
- (V) :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
- (A) :TO HI-FI AUDIO SECTION

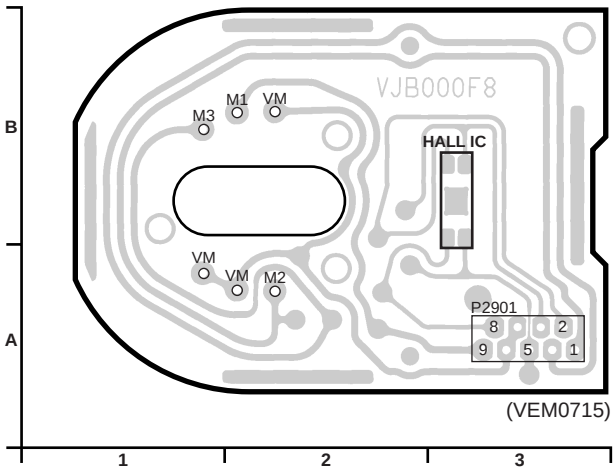
DP7501
25U39169TANF



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

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





CYLINDER STATOR UNIT	
Integrated Circuit	
HALL IC	B-3
Connector	
P2901	A-3

ADDRESS INFORMATION

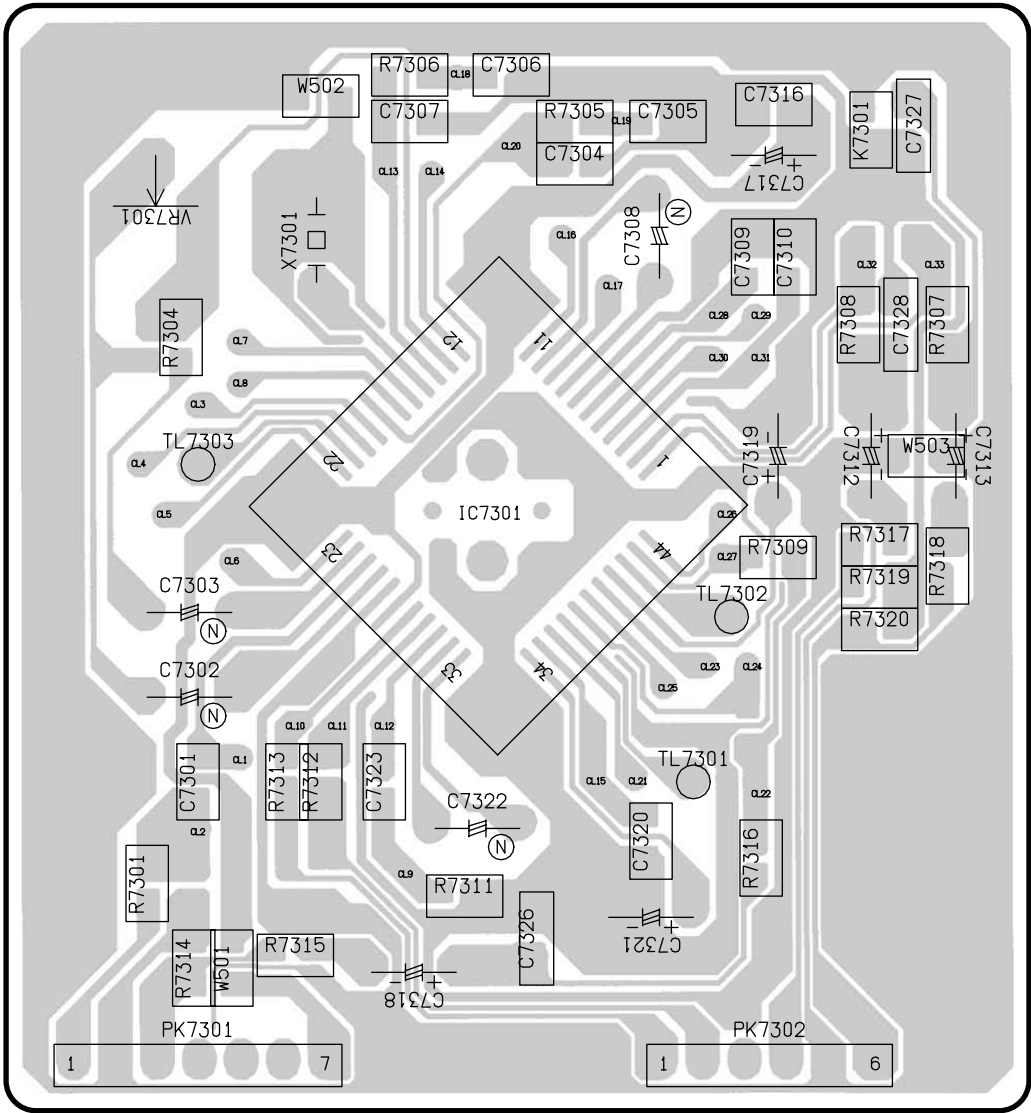
DECODER PACK C.B.A.	
Integrated Circuit	
IC7301	B-2
Test Point	
TL7301	A-2
TL7302	B-2
TL7303	B-1
Adjustment	
VR7301	C-1
Connector	
PK7301	A-1
PK7302	A-2

ADDRESS INFORMATION

(VEP07A16A:NV-FJ616EG/EGY)

(VEP07A16A:NV-FJ620EG/EGY)

(VEP07A16A:NV-FJ621EG/EGY)



Model No.	Part No.
NV-FJ616EG NV-FJ620EG NV-FJ621EG	VEP06D85E
NV-FJ616EGY NV-FJ620EGY NV-FJ621EGY	VEP06E00D
NV-FJ620B NV-FJ621B	VEP06D85F
NV-FJ620BL	VEP06D85G
NV-FJ616EC/ECM/ECN NV-FJ620EC/ECM/ECN NV-FJ621EC/ECM/ECN	VEP06D85H
NV-FJ616ECY NV-FJ620ECY NV-FJ621ECY	VEP06E00E

MAIN C.B.A.			
Transistor		Integrated Circuit	
Q1002	A-2	IC1101	D-1
Q1003	A-1	IC1102	C-2
Q1004	B-2	IC1501	B-4
Q1005	B-2	IC1502	B-6
Q1006	A-3	IC2501	F-2
Q1007	E-3	IC3001	C-7
Q1008	B-2	IC3501	E-5
Q1101	D-1	IC4501	E-6
Q1102	D-1	IC4901	E-4
Q1111	C-2	IC6001	C-3
Q1201	E-2	IC7501	A-5
Q1202	F-3	IC7502	A-6
Q1501	C-2	IC7503	B-4
Q1502	C-8	IC7504	B-4
Q4001	D-6	IC7701	B-5
Q4002	D-6	IC7702	A-7
Q4005	F-8	Test Point	
Q4006	F-7		
Q4901	F-3	TL2502	D-3
Q4903	F-3	TL2503	C-3
Q4904	E-4	TL4503	D-5
Q7601	F-8	TL6010	B-3
Q7701	B-4	TL6012	B-4
Q7702	C-4	TL6013	B-6
Q7703	C-4	TW2001	F-5
Q7704	D-4	TW2002	F-2
Q7705	B-4	TW2015	F-2
Transistor & Resistor		TW3001	F-5
		TW3002	F-4
QR1001	A-3	TW3003	F-4
QR1002	B-2	TW3030	F-4
QR1201	E-3	TW4501	F-5
QR3501	D-5	TW4502	F-6
QR3502	D-5	TW4901	F-5
QR4001	D-7	TW4902	F-5
QR4002	D-7	TW4903	F-6
QR4003	D-6	TW4906	F-3
QR4004	D-8	TW4907	F-5
QR4005	C-7	TW6002	F-3
QR4008	F-7	Connector	
QR4009	F-7		
QR4501	E-7	P1101	F-1
QR4502	E-7	P1501	F-4
QR4503	E-7	P2501	C-3
QR4504	E-7	P2502	F-2
QR4505	F-8	P3502	F-6
QR4506	F-8	P4002	D-7
QR4507	D-6	P4003	F-7
QR4903	F-3	DU7601	D-8
QR4904	F-3	PK7301	C-8
QR4905	F-3	PK7302	B-8
QR6001	B-3	TU7601	E-8
QR6006	B-2		
QR7501	B-4		
QR7601	C-8		
QR7602	C-8		
QR7603	B-8		
QR7604	B-8		

ADDRESS INFORMATION

TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0702	A-3
Integrated Circuit	
IC0701	C-2
Adjustment	
T0701	B-3
VR0701	D-2
Connector	
PK0701	A-2
PP0701	B-1

ADDRESS INFORMATION

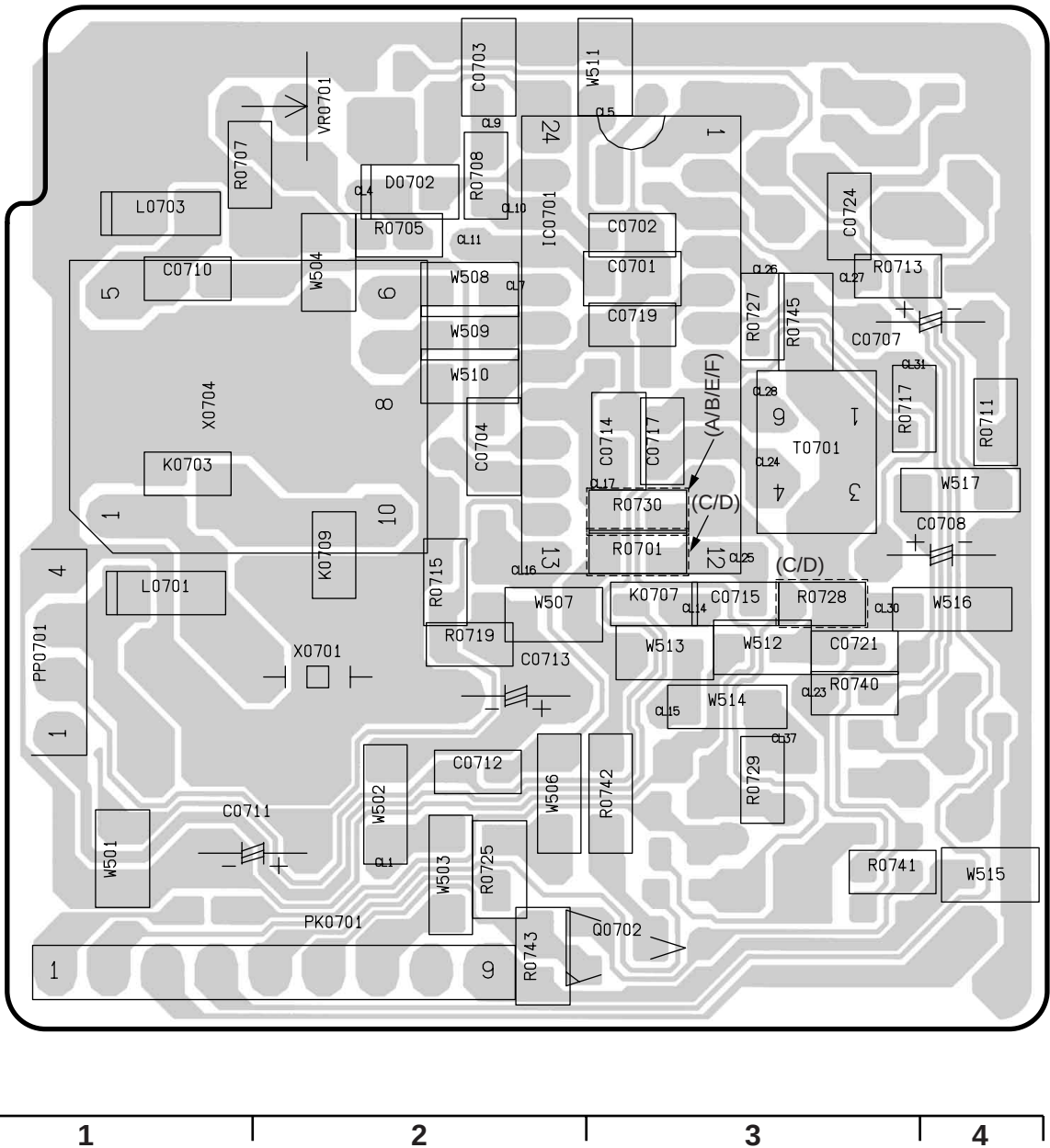
(VEP07A23L:NV-FJ616EG/EGY/EC/ECM/ECN/ECY)

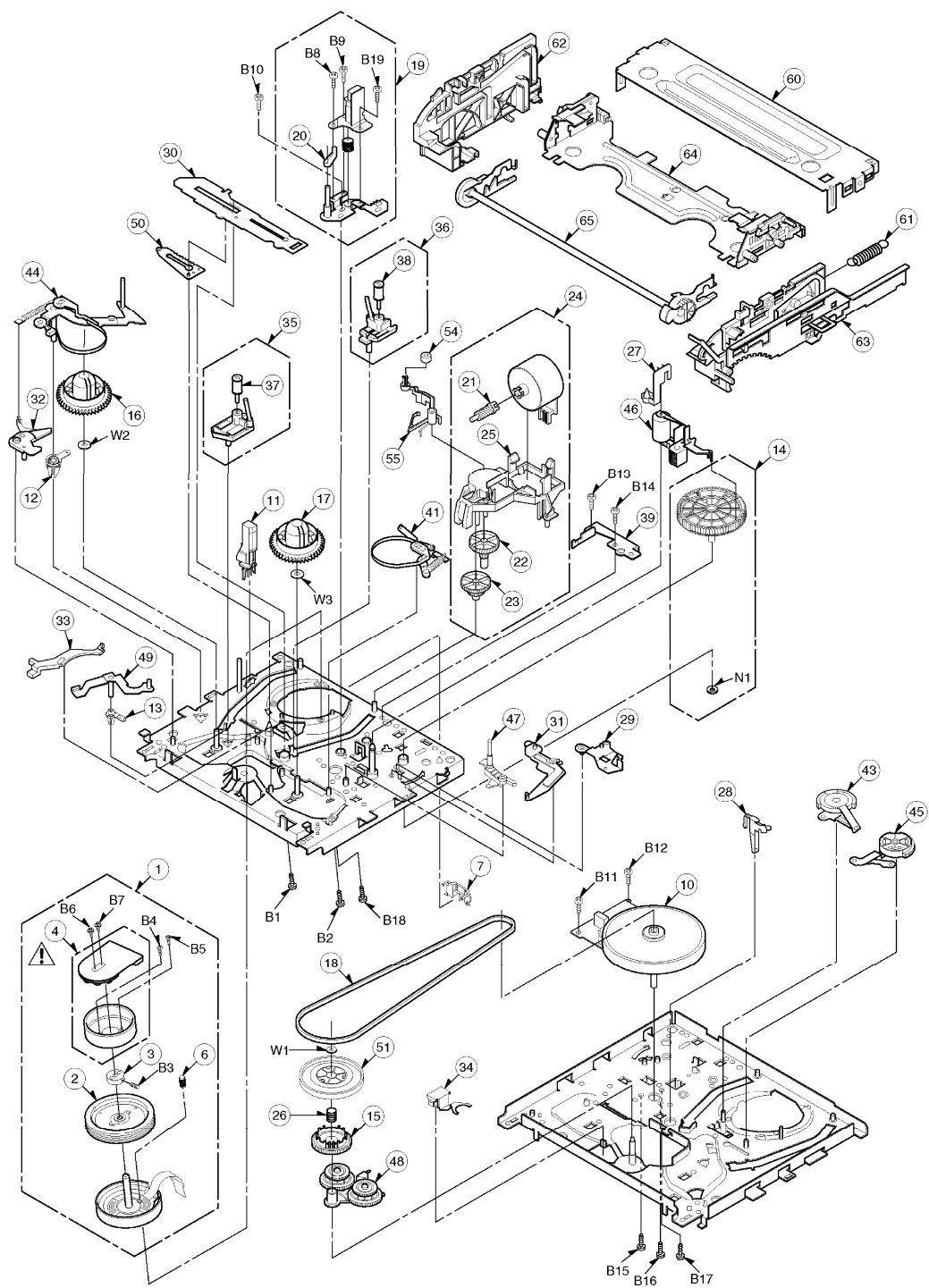
(VEP07A23L:NV-FJ620EG/EGY/EC/ECM/ECN/ECY)

(VEP07A23M:NV-FJ620B/BL)

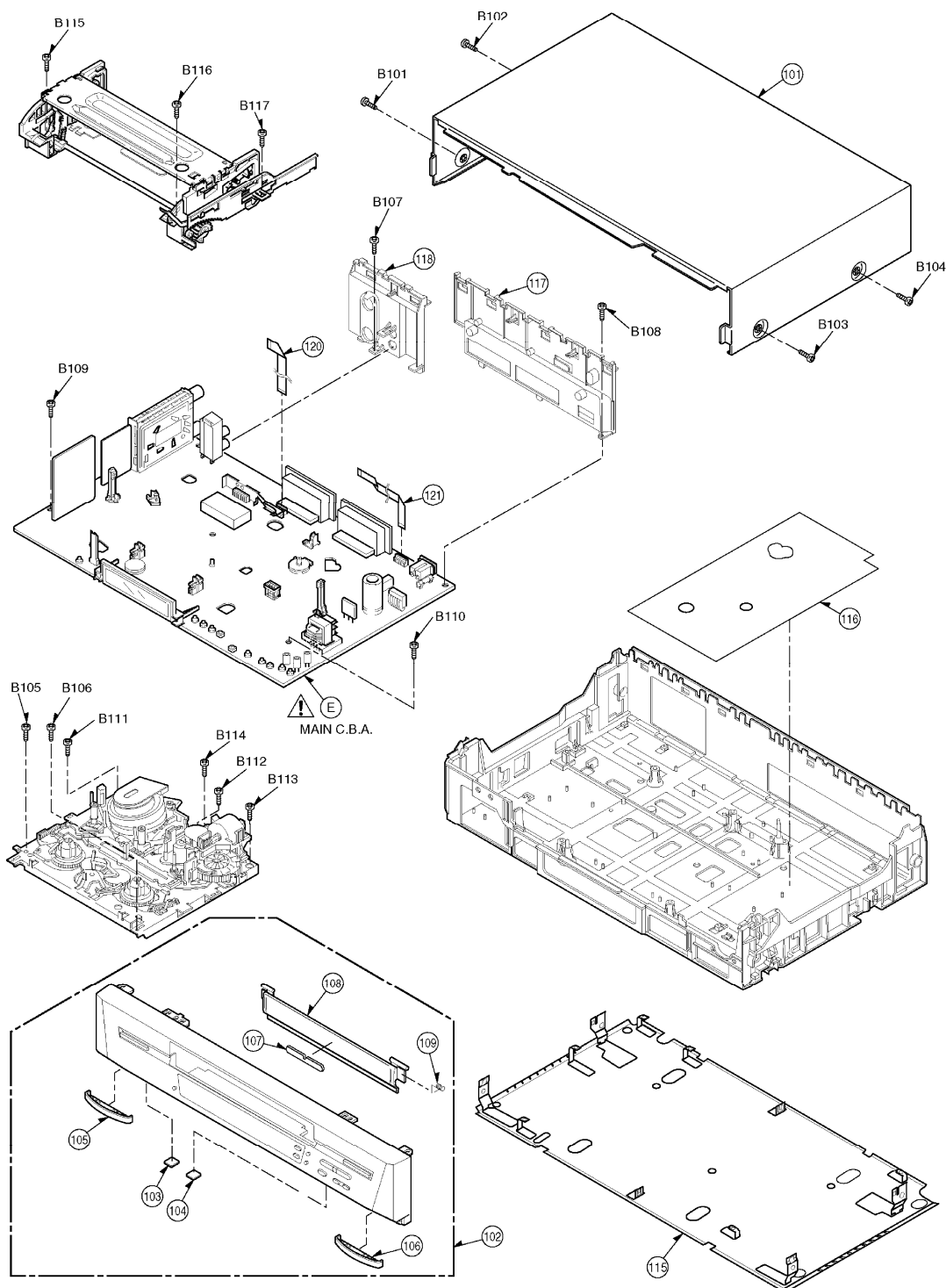
(VEP07A23L:NV-FJ621EG/EGY/EC/ECM/ECN/ECY)

(VEP07A23M:NV-FJ621B)

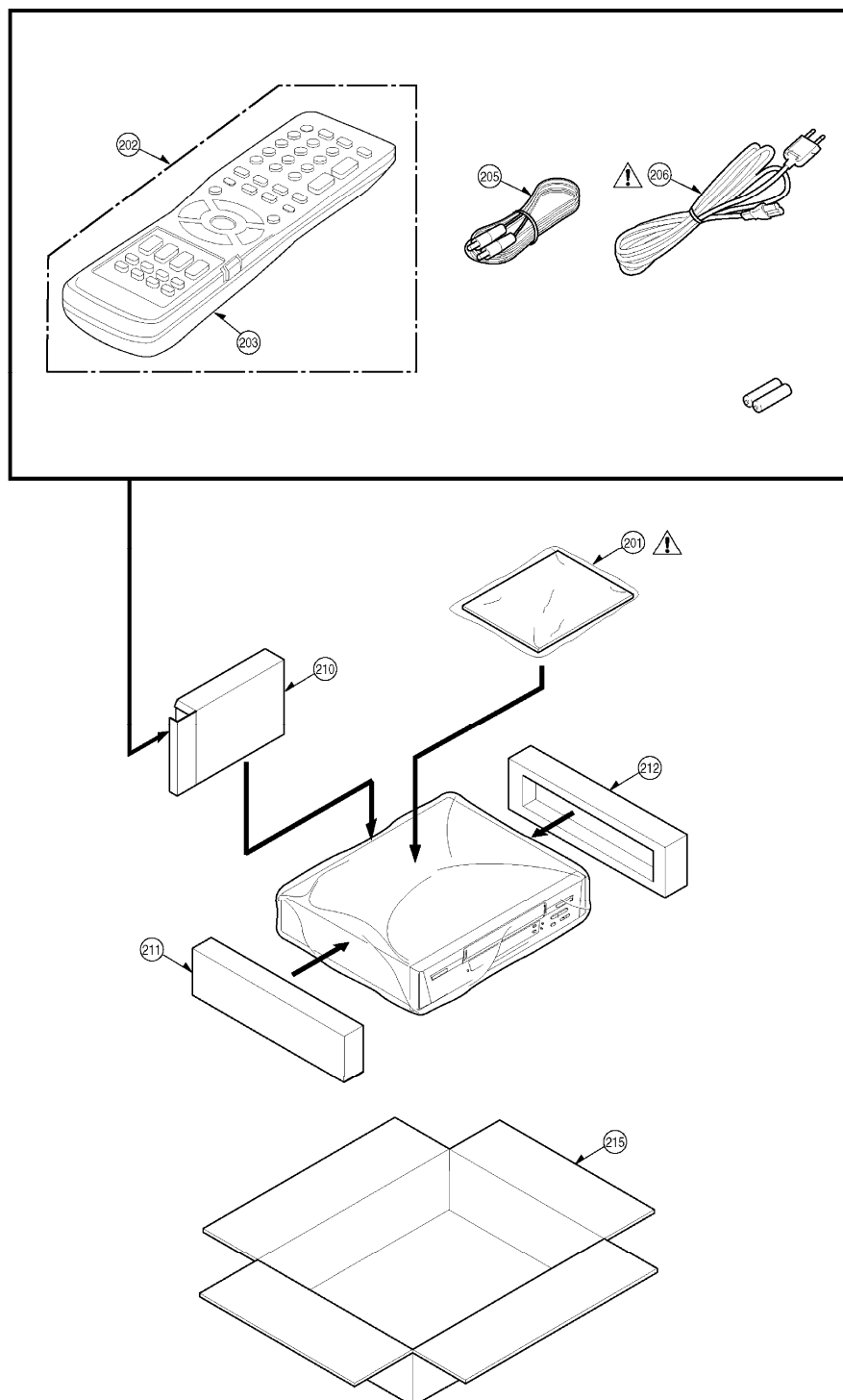




10.2. CASING PARTS SECTION



10.3. PACKING PARTS SECTION



11. REPLACEMENT PARTS LIST

11.1. CHASSIS PARTS SECTION PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks
<u>1</u>	VEG1522	CYLINDER UNIT	[SUPPLIED FROM MBV]
<u>2</u>	VXP2001	UPPER CYLINDER UNIT	[SUPPLIED FROM MBV]
<u>3</u>	VDB1256	CYLINDER RETAINER	
<u>4</u>	VEM0715	CYLINDER MOTOR UNIT	
<u>6</u>	VXS0135	EARTH BRUSH UNIT	
<u>7</u>	VMD3795	FLAT CABLE HOLDER	[SUPPLIED FROM MBV]
<u>10</u>	VEK9069	CAPSTAN UNIT	
<u>11</u>	L1AZ00000004	FE HEAD	
<u>12</u>	VDB1431	TENSION ARM BOSS	
<u>13</u>	VDB1460	SUPPLY BRAKE ARM BOSS	
<u>14</u>	VDG1220KIT	MAIN CAM GEAR	
<u>15</u>	VDG1221	CONVERSION GEAR	
<u>16</u>	VDR0350	REEL TABLE	
<u>17</u>	VDR0350	REEL TABLE	
<u>18</u>	VDV0382	CAPSTAN BELT	
<u>19</u>	VED0412	A/C HEAD UNIT	
<u>20</u>	VMX2656	P4 CAP	
<u>21</u>	VDG1217	WORM GEAR	
<u>22</u>	VDG1218	WORM WHEEL GEAR	
<u>23</u>	VDG1219	CENTRE GEAR	
<u>24</u>	VEM0604	LOADING MOTOR UNIT	
<u>25</u>	VMD2619	MOTOR BRACKET	
<u>26</u>	VMB3045	CONVERSION GEAR SPRING	
<u>27</u>	VMD2620	OPENER PIECE	
<u>28</u>	VMD2738	LED PRISM	
<u>29</u>	VML3165	DRIVE RACK ARM	
<u>30</u>	VML3166	MAIN LEVER	
<u>31</u>	VML3167	DRIVE MAIN LEVER ARM	
<u>32</u>	VML3172	SUPPLY SPRING ARM	
<u>33</u>	VML3176	CONVERSION LEVER A	
<u>34</u>	VML3177	CONVERSION LEVER B	
<u>35</u>	VXA6040	INCLINED BASE (S) UNIT	
<u>36</u>	VXA5854	INCLINED BASE (T) UNIT	
<u>37</u>	VXP1891	ROLLER POST	
<u>38</u>	VXP1891	ROLLER POST	
<u>39</u>	VMA9672	SUPPORT ANGLE	
<u>41</u>	VXL2667	TAKE UP BRAKE ARM UNIT	
<u>43</u>	VXL2670	TAKE UP LOADING ARM UNIT	
<u>44</u>	VXL2798	TENSION ARM UNIT	[SUPPLIED FROM MBV]
<u>45</u>	VXL2672	SUPPLY LOADING ARM UNIT	
<u>46</u>	VXL2785	PINCH ARM UNIT	
<u>47</u>	VXL2996	P5 ARM UNIT	
<u>48</u>	VXL2792	IDLER ARM UNIT	
<u>49</u>	VXL2733	SUPPLY BRAKE ARM UNIT	
<u>50</u>	VXL2747	LOADING RACK UNIT	
<u>51</u>	VXP2035	CENTRE CLUTCH UNIT	
<u>54</u>	VDP1668-K	CLEANER ROLLER	
<u>55</u>	VML3164	CLEANER ARM	
<u>60</u>	VMA9516	TOP PLATE	
<u>61</u>	VMB3047	CONNECTION SPRING	
<u>62</u>	VMD3379	SIDE PLATE (L)	[SUPPLIED FROM MBV]
<u>63</u>	VXA6540	SIDE PLATE (R) UNIT	
<u>64</u>	VXA5746	CASSETTE HOLDER UNIT	
<u>65</u>	VXP1730	MAIN SHAFT UNIT	
<u>B1</u>	VHD1117	SCREW	

Ref. No.	Part No.	Part Name & Description	Remarks
B2	VHD1117	SCREW	
B3	VHD0842	SCREW	
B4	VHD0843	SCREW	
B5	VHD0843	SCREW	
B6	VHD0844	SCREW	
B7	VHD0844	SCREW	
B8	VHD1066	SCREW	
B9	VHD1066	SCREW	
B10	VHD1044	SCREW	
B11	VHD1060	SCREW	
B12	VHD1071	SCREW	
B13	XTS26+6F	SCREW	
B14	XTN26+6F	SCREW	
B15	XTN26+7J	SCREW	
B16	XTN26+7J	SCREW	
B17	XTN26+7J	SCREW	
B18	VHD1095	SCREW	
B19	VHD1185	SCREW	
N1	VHN0311	PUSH NUT	
W1	VMX2208	WASHER	
W2	VMX3022	WASHER	
W3	VMX3022	WASHER	

11.2. CASING PARTS SECTION PARTS LIST

Ref. No.	Part No.	Part Name & Description	
101	VGM1733	TOP PANEL	NV
	VGM1748	TOP PANEL	[S ME
102	VYP8040	FRONT PANEL UNIT	[S
	VYP8041	FRONT PANEL UNIT	[S
	VYP8044	FRONT PANEL UNIT	[S
	VYP8045	FRONT PANEL UNIT	[S
	VYP8042	FRONT PANEL UNIT	[S
	VYP8043	FRONT PANEL UNIT	[S
103	RKA0072-K	FOOT	
104	RKA0072-K	FOOT	
105	VKA0191	LEG	
106	VKA0191	LEG	
107	VGB0554	SUPER DRIVE BADGE	[S
108	VKF3320	BLINDER PANEL	[S ME
108	VKF3321	BLINDER PANEL	[S ME
109	VMB2521	BLINDER SPRING	
115	VKU0575	BOTTOM PLATE	[S
116	VMZ3099	VO SHEET	[S
117	VJH1175	AV JACK PLATE	[S
118	VJH1173	ANT JACK PLATE	[S
120	VWJ1461	FLAT CARD CABLE (6P)	[S
121	VWJ1282	FLAT CARD CABLE (9P)	P2:
B101	XTW3+10TFC	SCREW	NV
	XTW3+10TFZ	SCREW	NV

Ref. No.	Part No.	Part Name & Description	
B102	XTW3+10TFC	SCREW	NV
	XTW3+10TFZ	SCREW	NV
B103	XTW3+10TFC	SCREW	NV
	XTW3+10TFZ	SCREW	NV
B104	XTW3+10TFC	SCREW	NV
	XTW3+10TFZ	SCREW	NV
B105	VHD0168	SCREW	
B106	VHD0168	SCREW	
B107	VHD1092	SCREW	
B108	VHD1092	SCREW	
B109	VHD1092	SCREW	
B110	VHD1092	SCREW	
B111	VHD1092	SCREW	
B112	VHD1092	SCREW	
B113	VHD1092	SCREW	
B114	XTV26+6JFR	SCREW	
B115	XTV26+8FR	SCREW	
B116	XTV26+8FR	SCREW	
B117	XTV26+8FR	SCREW	

11.3. PACKING PARTS SECTION PARTS LIST

Ref. No.	Part No.	Part Name & Description	
201	VQT9015	OPERATING INSTRUCTIONS(GE)	
	VQT9016	OPERATING INSTRUCTIONS(FRE)	
	VQT9017	OPERATING INSTRUCTIONS(ITA)	
	VQT9019	OPERATING INSTRUCTIONS(DU)	
	VQT9024	OPERATING INSTRUCTIONS(GRI)	
	VQT9014	OPERATING INSTRUCTIONS(ENG)	
	VQT9047	OPERATING INSTRUCTIONS(ENG)	
	VQT9018	OPERATING INSTRUCTIONS(SPA)	
	VQT9020	OPERATING INSTRUCTIONS(SWA)	
	VQT9022	OPERATING INSTRUCTIONS(FIN)	
	VQT9023	OPERATING INSTRUCTIONS(POR)	
	VQT9021	OPERATING INSTRUCTIONS(DAN)	
202	N2QAKB000001	REMOTE CONTROLLER	
203	R0186-720010	BATTERY COVER	
205	VJA1089	DIN RF CABLE	
206	VJA1023	AC CORD	
	VJA1022	AC CORD	
210	VPK2246	ACCESSORIES PACKING	
211	VPN5491	CUSHION (L)	
212	VPN5492	CUSHION (R)	
215	VPG0H38	PACKING	
	VPG0H39	PACKING	
		SERVICE FIXTURES & TOOLS	
	VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	
	VFK0335	RETAINING RING REMOVER	
		(3mm/4mm)	

Ref. No.	Part No.	Part Name
	VFK0329	POST ADJUSTMENT SCREWDRIVER
	VFK0326	HEX WRENCH SET
	VFK0132	BACK TENSION METER
	VFK27	HEAD CLEANING STICK
	VFK1024	MOLYBDENE GREASE
	VFK0330	FINE ADJUSTMENT GEAR DRIVE
	VFK1301	SILICONE GREASE

11.4. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Part Name
bl	VEP06D85F	MAIN C.B.A.
bl	VEP06D85G	MAIN C.B.A.
bl	VEP06D85E	MAIN C.B.A.
bl	VEP06E00D	MAIN C.B.A.
bl	VEP06D85H	MAIN C.B.A.
bl	VEP06E00E	MAIN C.B.A.
bl	VEP07A18A	NICAM DECODER PACK C.B.A.
bl	VEP07A18J	NICAM DECODER PACK C.B.A.
bl	VEP07A16A	DECODER PACK C.B.A.
bl	VEP07A23M	TV DEMODULATOR PACK C.B.A.
bl	VEP07A23L	TV DEMODULATOR PACK C.B.A.
bl	-----	CYLINDER STATOR C.B.A.
bl	-----	CAPSTAN DRIVE C.B.A.

Ref. No.	Part No.	Part Name
Ы	VEP06D85F	MAIN C.B.A.
Ы	VEP06D85G	MAIN C.B.A.
Ы	VEP06D85E	MAIN C.B.A.
Ы	VEP06E00D	MAIN C.B.A.
Ы	VEP06D85H	MAIN C.B.A.
Ы	VEP06E00E	MAIN C.B.A.
C0701	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U
C0702	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P
C0703	ECUM1A105KBN	C.CAPACITOR CH 10V 1U
C0704	ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U
C0707	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U
C0708	ECEA1HKAR47	E.CAPACITOR 50V 0.47U
C0710	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C0711	ECEA1CKA220	E.CAPACITOR 16V 22U
C0712	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C0713	ECEA0JKA331	E.CAPACITOR 6.3V 330U
C0714	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U
C0715	ECUX1H120JCV	C.CAPACITOR CH 50V 12P
C0715	ECUX1H030CCV	C.CAPACITOR CH 50V 3P
C0717	ECUM1H330GUV	C.CAPACITOR CH 50V 33P
C0719	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U
C0721	ECUX1H820JCV	C.CAPACITOR CH 50V 82P
C0721	ECUX1H121JCV	C.CAPACITOR CH 50V 120P
C0724	ECUX1H331KBV	C.CAPACITOR CH 50V 330P
C0724	ECUX1H221KBV	C.CAPACITOR CH 50V 220P
C1002	VCEA1ACB220	E.CAPACITOR 10V 22U
C1003	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C1004	VCEA1CCB470	E.CAPACITOR 16V 47U
C1006	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C1007	ECEA1CGE100	E.CAPACITOR 16V 10U
C1008	ECEA1HGE470	E.CAPACITOR 50V 47U
C1010	VCEA1CCB470	E.CAPACITOR 16V 47U
C1011	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C1013	VCEA1CCB100	E.CAPACITOR 16V 10U
C1101	ECKMNA102MEV	CERAMIC CAPACITOR
C1102	ECQB1H103JF	P.CAPACITOR 50V 0.01U
C1104	ECKMNA102MEV	CERAMIC CAPACITOR
C1106	ECKF1H102KB	C.CAPACITOR 50V 1000P
C1107	ECKMNA102MEV	CERAMIC CAPACITOR
C1108	ECCZ3A680KGE	C.CAPACITOR 1KV 68P
C1109	ECKD2H103PU	C.CAPACITOR 500V 0.01U
C1110	ECA1AHJ331	E.CAPACITOR 10V 330U
C1111	ECKF1H102KB	C.CAPACITOR 50V 1000P
C1112	ECQB1H822JF	P.CAPACITOR 50V 8200P
C1114	ECA1HHJ470	E.CAPACITOR 50V 47U
C1118	ECQU2A683MVA	P.CAPACITOR 100V 0.068U
C1120	ECEC2GG330	E.CAPACITOR 400V 33U
C1122	ECKF1H121KB	C.CAPACITOR 50V 120P
C1131	EEUFG1E821	E.CAPACITOR 25V 820P
C1132	ECA1EHJ331	E.CAPACITOR 25V 330U
C1134	EEUFG1A182	E.CAPACITOR 10V 1800P
C1135	ECA1AHJ331	E.CAPACITOR 10V 330U
C1136	ECKD2H101KB	C.CAPACITOR 500V 100P

Ref. No.	Part No.	Part Name
C1137	ECA1HHJ470	E.CAPACITOR 50V 47U
C1138	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C1139	ECKD2H221KB	C.CAPACITOR 500V 220P
C1140	ECA1HHJ101	E.CAPACITOR 50V 100U
C1141	ECKF1H103ZF	C.CAPACITOR 50V 0.01U
C1142	ECKD2H221KB	C.CAPACITOR 500V 220P
C1143	EEUFG1A331	E.CAPACITOR 10V 330P
C1202	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C1204	VCEA1ACB220	E.CAPACITOR 10V 22U
C1205	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C1206	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C1207	VCEA0JCB470	E.CAPACITOR 6.3V 47U
C1208	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C1502	ECUX1H331JCV	C.CAPACITOR CH 50V 330P
C2502	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C2505	ECUM1C563KBV	C.CAPACITOR CH 16V 0.056U
C2506	ECUM1C563KBV	C.CAPACITOR CH 16V 0.056U
C2507	ECUM1C563KBV	C.CAPACITOR CH 16V 0.056U
C2508	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C2509	ECUM1C474ZFV	C.CAPACITOR CH 16V 0.47U
C2510	ECUX1H330JCV	C.CAPACITOR CH 50V 33P
C2511	ECEA0JKN220	E.CAPACITOR 6.3V 22U
C2512	VCEA1ECB4R7	E.CAPACITOR 25V 4.7U
C2513	ECUX1H392KBV	C.CAPACITOR CH 50V 3900P
C2515	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U
C2516	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U
C2517	ECA0JHJ221	E.CAPACITOR 6.3V 220U
C2518	ECUM1H473ZFV	C.CAPACITOR CH 50V 0.047U
C2519	VCEA1ECB470	E.CAPACITOR 25V 47U
C2520	ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U
C2521	ECUM1C154KBN	C.CAPACITOR CH 16V 0.15U
C2522	ECUM1C154KBN	C.CAPACITOR CH 16V 0.15U
C2523	ECUM1C154KBN	C.CAPACITOR CH 16V 0.15U
C2524	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U
C3002	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P
C3003	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P
C3004	VCEA1HCB010	E.CAPACITOR 50V 1U
C3008	ECUX1H680JCV	C.CAPACITOR CH 50V 68P
C3009	ECUX1H070DCV	C.CAPACITOR CH 50V 7P
C3012	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3013	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C3015	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C3016	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C3017	VCEA0JCB221	E.CAPACITOR 6.3V 220U
C3018	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3019	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3020	VCEA1HCB010	E.CAPACITOR 50V 1U
C3021	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U
C3022	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3023	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C3024	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3025	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C3028	VCEA0JCB470	E.CAPACITOR 6.3V 47U
C3029	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C3030	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3031	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C3032	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P

Ref. No.	Part No.	Part Name
C3033	VCEA1HCBR47	E.CAPACITOR 50V 0.47U
C3035	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U
C3036	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3037	VCEA0JCB221	E.CAPACITOR 6.3V 220U
C3038	VCEA1ECB4R7	E.CAPACITOR 25V 4.7U
C3039	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3040	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C3041	VCEA1ACB220	E.CAPACITOR 10V 22U
C3042	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U
C3043	VCEA1CCB100	E.CAPACITOR 16V 10U
C3045	ECUX1H560JCV	C.CAPACITOR CH 50V 56P
C3046	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C3047	ECYX1H821JCV	C.CAPACITOR CH 50V 820P
C3048	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C3050	VCEA1ACB220	E.CAPACITOR 10V 22U
C3051	ECUX1H681JCV	C.CAPACITOR CH 50V 680P
C3052	ECUX1H820JCV	C.CAPACITOR CH 50V 82P
C3053	ECUX1H680JCV	C.CAPACITOR CH 50V 68P
C3054	ECUX1H680JCV	C.CAPACITOR CH 50V 68P
C3501	VCEA0JCC470	E.CAPACITOR 6.3V 47U
C3502	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U
C3503	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U
C3505	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U
C3506	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3507	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3508	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3509	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3510	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C3511	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4001	ECUM1H222JN	C.CAPACITOR CH 50V 2200P
C4002	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4003	ECQB1H822JF	P.CAPACITOR 50V 8200P
C4004	VCEA1ACB220	E.CAPACITOR 10V 22U
C4005	VCEA1HCB010	E.CAPACITOR 50V 1U
C4006	ECUX1H272KBV	C.CAPACITOR CH 50V 2700P
C4007	ECUM1H122JCN	C.CAPACITOR CH 50V 1200P
C4008	VCEA1ECB4R7	E.CAPACITOR 25V 4.7U
C4009	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U
C4010	ECUM1E273KBV	C.CAPACITOR CH 25V 0.027U
C4011	ECUX1H153KBV	C.CAPACITOR CH 50V 0.015U
C4013	ECUX1H153KBV	C.CAPACITOR CH 50V 0.015U
C4014	VCEA1HCB010	E.CAPACITOR 50V 1U
C4015	VCEA0JCB470	E.CAPACITOR 6.3V 47U
C4016	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4017	VCEA1ACB220	E.CAPACITOR 10V 22U
C4018	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4019	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4020	VCEA0JCB470	E.CAPACITOR 6.3V 47U
C4026	VCEA1ACB220	E.CAPACITOR 10V 22U
C4027	VCEA1CCB100	E.CAPACITOR 16V 10U
C4028	ECUX1E223KBV	C.CAPACITOR CH 25V 0.022U
C4029	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P
C4030	VCEA0JCB221	E.CAPACITOR 6.3V 220U
C4031	ECQB1H223JF	P.CAPACITOR 50V 0.022U
C4032	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C4033	ECUX1H101JCV	C.CAPACITOR CH 50V 100P
C4501	VCEA1CCB100	E.CAPACITOR 16V 10U

Ref. No.	Part No.	Part Name
C4502	VCEA1CCB100	E.CAPACITOR 16V 10U
C4503	VCEA1CCB100	E.CAPACITOR 16V 10U
C4504	ECQB1H473JF	P.CAPACITOR 50V 0.047U
C4505	ECEA1AKS330	E.CAPACITOR 10V 33U
C4506	VCEA1CCC100	E.CAPACITOR 16V 10U
C4507	ECEA1CKS220	E.CAPACITOR 16V 22U
C4508	ECQB1H153JF	P.CAPACITOR 50V 0.015U
C4509	ECUX1H333ZFV	C.CAPACITOR CH 50V 0.033U
C4510	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C4511	ECUX1H151JCV	C.CAPACITOR CH 50V 150P
C4512	ECUX1H151JCV	C.CAPACITOR CH 50V 150P
C4513	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C4514	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C4515	ECEA0JKS101	E.CAPACITOR 6.3V 100U
C4516	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4517	ECUX1H101JCV	C.CAPACITOR CH 50V 100P
C4518	ECUM1C224KBN	C.CAPACITOR CH 16V 0.22U
C4519	ECQB1H153JF	P.CAPACITOR 50V 0.015U
C4520	ECEA1CKA220	E.CAPACITOR 16V 22U
C4521	VCEA1CCB100	E.CAPACITOR 16V 10U
C4522	ECQB1H473JF	P.CAPACITOR 50V 0.047U
C4523	ECEA1AKA330	E.CAPACITOR 10V 33U
C4524	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U
C4525	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C4528	VCEA1CCB100	E.CAPACITOR 16V 10U
C4529	VCEA1CCB100	E.CAPACITOR 16V 10U
C4530	VCEA1CCB100	E.CAPACITOR 16V 10U
C4531	VCEA1CCB100	E.CAPACITOR 16V 10U
C4532	VCEA1CCB100	E.CAPACITOR 16V 10U
C4533	VCEA1CCB100	E.CAPACITOR 16V 10U
C4534	VCEA1ACB220	E.CAPACITOR 10V 22U
C4535	VCEA1CCB100	E.CAPACITOR 16V 10U
C4536	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4537	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U
C4538	VCEA1CCB470	E.CAPACITOR 16V 47U
C4539	ECUX1H180JCV	C.CAPACITOR CH 50V 18P
C4540	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4541	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4903	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4904	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4905	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4906	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4907	ECUX1H470JCV	C.CAPACITOR CH 50V 47P
C4908	ECUX1H470JCV	C.CAPACITOR CH 50V 47P
C4909	ECUX1H470JCV	C.CAPACITOR CH 50V 47P
C4910	ECUX1H470JCV	C.CAPACITOR CH 50V 47P
C4912	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4913	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4914	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4915	ECUX1H471KBV	C.CAPACITOR CH 50V 470P
C4916	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4919	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4920	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4921	VCEA0JCB221	E.CAPACITOR 6.3V 220U
C4923	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4925	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4926	VCEA0JCB221	E.CAPACITOR 6.3V 220U

Ref. No.	Part No.	Part Name
C4928	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4929	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4930	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4937	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4941	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C4942	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U
C4946	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C6001	VCEA0JCB470	E.CAPACITOR 6.3V 47U
C6002	ECUX1H151JCV	C.CAPACITOR CH 50V 150P
C6003	ECUX1H471JCV	C.CAPACITOR CH 50V 470P
C6004	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C6005	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C6008	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P
C6009	ECUX1H180JCV	C.CAPACITOR CH 50V 18P
C6010	ECUX1H180JCV	C.CAPACITOR CH 50V 18P
C6011	ECUX1H180JCV	C.CAPACITOR CH 50V 18P
C6012	ECUX1H150JCV	C.CAPACITOR CH 50V 15P
C6013	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C6014	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P
C6015	VCEA1CCB100	E.CAPACITOR 16V 10U
C6016	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C6017	ECUX1H681JCV	C.CAPACITOR CH 50V 680P
C7301	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U
C7301	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7302	VCEA0JAW101	E.CAPACITOR 6.3V 100U
C7302	ECEA1HKNR47	E.CAPACITOR 50V 0.47U
C7303	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7303	ECEA1HKNR47	E.CAPACITOR 50V 0.47U
C7304	VCEA0JAW101	E.CAPACITOR 6.3V 100U
C7304	ECUM1H681JCN	C.CAPACITOR CH 50V 680P
C7305	ECUX1H330JCV	C.CAPACITOR CH 50V 33P
C7305	ECUM1H123KBN	C.CAPACITOR CH 50V 0.012U
C7306	ECUX1H330JCV	C.CAPACITOR CH 50V 33P
C7306	ECUM1H123KBN	C.CAPACITOR CH 50V 0.012U
C7307	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7307	ECUM1H681JCN	C.CAPACITOR CH 50V 680P
C7308	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U
C7308	ECEA1HKNR47	E.CAPACITOR 50V 0.47U
C7309	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U
C7310	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U
C7311	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
C7312	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7312	ECEA1CKA100	E.CAPACITOR 16V 10U
C7313	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7313	ECEA1CKA100	E.CAPACITOR 16V 10U
C7315	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U
C7316	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7316	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U
C7317	VCEA1CAW100	E.CAPACITOR 16V 10U
C7317	ECEA0JKA101	E.CAPACITOR 6.3V 100U
C7318	VCEA0JAW470	E.CAPACITOR 6.3V 47U
C7318	ECEA1CKA100	E.CAPACITOR 16V 10U
C7319	VCEA1CAW100	E.CAPACITOR 16V 10U
C7319	ECEA1CKA470	E.CAPACITOR 16V 47U
C7320	VCEA1CAW100	E.CAPACITOR 16V 10U
C7320	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P
C7321	ECEA1HKAR47	E.CAPACITOR 50V 0.47U



Ref. No.	Part No.	Part Name
C7322	ECEA1HKNR47	E.CAPACITOR 50V 0.47U
C7323	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U
C7324	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7325	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7326	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P
C7327	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P
C7328	ECUM1H152KBM	C.CAPACITOR CH 50V 1500P
C7341	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P
C7342	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P
C7501	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7502	VCEA1HCB100	E.CAPACITOR 50V 10U
C7503	ECUX1H120JCV	C.CAPACITOR CH 50V 12P
C7504	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C7507	VCE0073	SUPER CAPACITOR
C7508	VCEA0JCB221	E.CAPACITOR 6.3V 220U
C7509	ECUX1C683ZFV	C.CAPACITOR CH 16V 0.068U
C7510	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7511	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7601	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C7602	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7603	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C7604	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C7607	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C7608	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C7609	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C7610	VCEA1HCB100	E.CAPACITOR 50V 10U
C7611	ECUM1H221JCN	C.CAPACITOR CH 50V 220P
C7612	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7614	ECUX1H330JCV	C.CAPACITOR CH 50V 33P
C7615	ECUX1H330JCV	C.CAPACITOR CH 50V 33P
C7616	VCEA0JCB101	E.CAPACITOR 6.3V 100U
C7617	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7619	ECUX1H330JCV	C.CAPACITOR CH 50V 33P
C7620	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7622	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C7623	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U
C7625	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C7626	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C7701	ECUX1H151JCV	C.CAPACITOR CH 50V 150P
C7702	ECUM1C474ZFV	C.CAPACITOR CH 16V 0.47U
C7703	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7704	VCEA0JCB470	E.CAPACITOR 6.3V 47U
C7705	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P
C7706	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U
C7707	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U
C7708	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C7709	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C7711	ECUX1H221JCV	C.CAPACITOR CH 50V 220P
C7712	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U
C7713	VCEA0JCB470	E.CAPACITOR 6.3V 47U
D0702	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
D1002	1SS254	DIODE
D1003	MA4051N-H	DIODE
D1006	MA4051N-M	DIODE
D1007	1SS254	DIODE
D1008	MA4130N-L	DIODE

Ref. No.	Part No.	Part Name
D1102	S1WBA80-4062	BRIDGE DIODE
D1103	AP01C	DIODE
D1104	MA185	DIODE
D1105	1SS254	DIODE
D1106	1SS254	DIODE
D1107	1SS254	DIODE
D1114	21DQ06FC4	DIODE
D1118	ERG1SJ223	M.RESISTOR 1W 22K
D1121	RL2ZP	DIODE
D1123	ERA22-04	DIODE
D1124	ERA22-04	DIODE
D1125	11EQS06	DIODE
D1130	MA7300B	DIODE
D1201	MA4051N-M	DIODE
D1202	1SS254	DIODE
D1501	SIR505S	DIODE
D2501	1SS254	DIODE
D2502	1SS254	DIODE
D2503	B0EAKL000031	DIODE
D2504	B0EAKL000031	DIODE
D3001	1SS254	DIODE
D4502	1SS254	DIODE
D4901	MA4051N-M	DIODE
D4902	MA4051N-M	DIODE
D4903	1SS254	DIODE
D4904	1SS254	DIODE
D7501	MA4220N-M	DIODE
D7503	RB441P	DIODE
D7601	MA4300M	DIODE
D7701	1SS254	DIODE
DP7501	A2BD00000040	DISPLAY TUBE
F1101	XBA2C16TB0	FUSE
FL7301	VLF0633	FILTER
IC0701	LA75503	IC
IC1101	C5HACZZ00002	IC
IC1102	UPC1093J	IC
IC1501	RPI354N	IC
IC1502	RPI354N	IC
IC2501	AN3811NK	IC
IC3001	AN3531NFBS	IC
IC3501	AN3368SB	IC
IC4501	AN3656NFBPTV	IC
IC4901	LA73021M	IC
IC6001	C2CBJG000139	IC
IC7301	TDA9874AH	IC
IC7301	TDA9873H	IC
IC7302	PST7043	IC
IC7501	M35502AFP	IC
IC7502	PNA4611M08VT	PHOTO DIODE
IC7503	RN5VD28AA	IC
IC7504	S80743AL	IC
IC7701	C1AB00001293	IC

Ref. No.	Part No.	Part Name
IC7702	M24C16-WBN6	IC
IP1001	UNH000300A	IC PROTECTOR
IP1002	UNH001200A	IC PROTECTOR
IP1003	UNH000300A	IC PROTECTOR
IP1004	UNH000300A	IC PROTECTOR
IP1101	VSF0015A10	FUSE
JK4901	VJJ0377	RCA JACK
JK4902	K1FB121B0003	SOCKET
JK4903	K1FB121B0003	SOCKET
K0703	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
K0707	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
K0709	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
K3003	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K3506	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K3507	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K3508	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K3509	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K4004	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K4007	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
K7302	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
K7303	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
K7501	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K7603	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
K7605	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
L0701	ELJNAR22JF	CHIP INDUCTOR
L0701	ELJNAR18JF	CHIP INDUCTOR
L0703	ELJNA1R8JF	CHIP INDUCTOR
L0703	ELJNA2R2JF	INDUCTOR 2.2UH
L1107	ELF15N005A	LINE FILTER
L1108	ELF15N003A	LINE FILTER
L1121	VLQ0655K220	COIL 22UH
L1122	G0A220G00018	COIL
L1123	VLQ0599J101	COIL 100UH
L1124	VLQ0599J101	COIL 100UH
L2501	VLQ0599J680	COIL 68UH
L3002	VLQ0599J220	COIL 22UH
L3005	VLQ0599J470	COIL 47UH
L3006	VLQ0599J101	COIL 100UH
L3007	VLQ0599J680	COIL 68UH
L3008	VLQ0599J101	COIL 100UH
L3009	VLQ0599J330	COIL 33UH
L3010	VLQ0599J470	COIL 47UH
L3011	VLQ0599J390	COIL 39UH
L3012	VLQ0599J560	COIL 56UH
L3501	VLQ0599J330	COIL 33UH
L4001	ELELN153JA	INDUCTOR 15000UH
L4003	VLQ0599J680	COIL 68UH
L4502	VLQ0599J1R2	COIL 1.2UH
L4503	VLQ0599J1R2	COIL 1.2UH

Ref. No.	Part No.	Part Name
L4504	VLQ0599J181	COIL 180UH
L4901	VLQ0599JR22	COIL 0.22UH
L4902	VLQ0599J680	COIL 68UH
L4903	VLQ0599J680	COIL 68UH
L6001	VLQ0599J101	COIL 100UH
L7302	VLQ0599J1R0	COIL 1UH
L7601	VLQ0599J330	COIL 33UH
L7602	VLQ0599J330	COIL 33UH
L7603	VLQ0599J330	COIL 33UH
L7604	VLQ0599J330	COIL 33UH
L7607	VLQ0599J100	COIL 10UH
L7608	VLQ0599J2R2	COIL 2.2UH
L7609	VLQ0599J100	COIL 10UH
L7701	VLQ0599J680	COIL 68UH
L7703	VLQ0599J680	COIL 68UH
LB1105	VLP0056	FERRITE BEAD
LB3501	VLP0147	COIL
LB3502	VLP0147	COIL
LB3503	VLP0147	COIL
LB3504	VLP0147	COIL
LB4901	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
LB4902	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
LB4903	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
LB4904	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
LB4905	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
LB4906	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
LB7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
LB7303	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
P1101	VJS3306	AC INLET
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P
P2501	VJP3835A012	CONNECTOR (MALE) 12P
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P
Q0702	2SD601A-S	TRANSISTOR
Q1002	2SD602A	TRANSISTOR
Q1003	2SD1996-S	TRANSISTOR
Q1004	2SD1996-S	TRANSISTOR
Q1005	2SD602A-R	TRANSISTOR
Q1006	2SD601A	TRANSISTOR
Q1007	2SD1996-S	TRANSISTOR
Q1008	2SB710A	TRANSISTOR
Q1101	2SD1996-S	TRANSISTOR
Q1102	2SB1030A	TRANSISTOR
Q1111	PC123ZY2	PHOTO COUPLER
Q1201	2SD1996-S	TRANSISTOR

Ref. No.	Part No.	Part Name
Q1202	2SD1996-S	TRANSISTOR
Q1501	PNB2301MBV	TRANSISTOR
Q1502	PNB2301MAV	TRANSISTOR
Q4001	2SD601A	TRANSISTOR
Q4002	2SD601A	TRANSISTOR
Q4005	2SB710-R	TRANSISTOR
Q4006	2SD602A-R	TRANSISTOR
Q4901	2SD601A	TRANSISTOR
Q4903	2SD601A	TRANSISTOR
Q4904	2SB709A	TRANSISTOR
Q7601	2SB709A	TRANSISTOR
Q7701	2SB709A	TRANSISTOR
Q7702	2SD601A	TRANSISTOR
Q7703	2SD601A	TRANSISTOR
Q7704	2SD601A	TRANSISTOR
Q7705	2SD601A	TRANSISTOR
QR1001	UN2112	TRANSISTOR
QR1002	UN2211	TRANSISTOR
QR1201	UN2212	TRANSISTOR-RESISTOR
QR3501	UN2212	TRANSISTOR-RESISTOR
QR3502	UN2212	TRANSISTOR-RESISTOR
QR4001	UN2212	TRANSISTOR-RESISTOR
QR4002	UN2211	TRANSISTOR
QR4003	UN2111	TRANSISTOR
QR4004	UN2215	TRANSISTOR-RESISTOR
QR4005	UN2113	TRANSISTOR-RESISTOR
QR4008	UN2215	TRANSISTOR-RESISTOR
QR4009	UN2215	TRANSISTOR-RESISTOR
QR4501	UN2216	TRANSISTOR
QR4502	UN2216	TRANSISTOR
QR4503	UN2216	TRANSISTOR
QR4504	UN2216	TRANSISTOR
QR4505	UN2113	TRANSISTOR-RESISTOR
QR4506	UN2216	TRANSISTOR
QR4507	UN2211	TRANSISTOR
QR4903	UN2212	TRANSISTOR-RESISTOR
QR4904	UN2215	TRANSISTOR-RESISTOR
QR4905	UN2215	TRANSISTOR-RESISTOR
QR6001	UN2215	TRANSISTOR-RESISTOR
QR6006	UN2211	TRANSISTOR
QR7501	UN2113	TRANSISTOR-RESISTOR
QR7601	UN2215	TRANSISTOR-RESISTOR
QR7602	UN2113	TRANSISTOR-RESISTOR
QR7603	UN2215	TRANSISTOR-RESISTOR
QR7604	UN2215	TRANSISTOR-RESISTOR
R0701	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K
R0705	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K
R0707	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K
R0708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K
R0711	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180
R0713	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
R0715	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K
R0717	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470
R0719	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K
R0725	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100

Ref. No.	Part No.	Part Name
R0727	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
R0728	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
R0729	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K
R0730	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K
R0740	ERJ3GEYG471	M.RESISTOR CH 1/16W 470
R0741	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220
R0742	ERJ8GEYJ151	M.RESISTOR CH 1/8W 150
R0745	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M
R1002	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K
R1003	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K
R1004	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K
R1005	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K
R1006	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R1007	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R1008	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K
R1009	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K
R1011	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K
R1012	ERDS2TJ182	C.RESISTOR 1/4W 1.8K
R1017	ERDS2TJ272	C.RESISTOR 1/4W 2.7K
R1023	ERDS2TJ822	C.RESISTOR 1/4W 8.2K
R1025	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R1026	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R1027	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R1101	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K
R1102	ERG1SJ223	M.RESISTOR 1W 22K
R1103	ERDS2FJ123	C.RESISTOR 1/4W 12K
R1104	ERDS2FJ123	C.RESISTOR 1/4W 12K
R1105	ERDS2FJ105	C.RESISTOR 1/4W 1M
R1106	ERDS2FJ105	C.RESISTOR 1/4W 1M
R1107	ERDS2FJ104	C.RESISTOR 1/4W 100K
R1108	ERDS2FJ123	C.RESISTOR 1/4W 12K
R1109	ERDS2FJ152	C.RESISTOR 1/4W 1.5K
R1110	ERDS2FJ123	C.RESISTOR 1/4W 12K
R1111	ERDS2FJ471	C.RESISTOR 1/4W 470
R1112	ERDS2FJ102	C.RESISTOR 1/4W 1K
R1113	ERX1SJR68	M.RESISTOR 1W 0.68
R1114	ERDS2FJ222	C.RESISTOR 1/4W 2.2K
R1115	ERDS1TJ470	C.RESISTOR 1/2W 47
R1116	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R1117	ERDS2FJ123	C.RESISTOR 1/4W 12K
R1118	ERDS2FJ101	C.RESISTOR 1/4W 100
R1119	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R1120	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K
R1121	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K
R1123	ERDS2FJ222	C.RESISTOR 1/4W 2.2K
R1124	ERDS2FJ223	C.RESISTOR 1/4W 22K
R1125	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R1126	ERDS2FJ123	C.RESISTOR 1/4W 12K
R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K
R1501	ERDS2TJ121	C.RESISTOR 1/4W 120
R1502	ERDS2TJ181	C.RESISTOR 1/4W 180
R1503	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R1504	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R1505	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R2501	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
R2502	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R2503	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K



Ref. No.	Part No.	Part Name
R2504	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R2505	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K
R2506	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M
R2507	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270
R2508	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K
R2509	ERDS2TJ331	C.RESISTOR 1/4W 330
R2510	ERDS2TJ330	C.RESISTOR 1/4W 33
R2511	ERDS2TJ330	C.RESISTOR 1/4W 33
R2512	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R2513	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5
R2514	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2
R2515	ERDS2TJ330	C.RESISTOR 1/4W 33
R3002	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K
R3006	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270
R3007	ERJ6GMYG331	M.RESISTOR CH 1/10W 330
R3012	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R3015	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R3016	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R3017	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K
R3018	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R3019	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K
R3022	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K
R3023	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K
R3025	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
R3026	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K
R3027	ERJ6GMYG271	M.RESISTOR CH 1/10W 270
R3028	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K
R3029	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K
R3030	ERJ6GMYG331	M.RESISTOR CH 1/10W 330
R3031	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K
R3032	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K
R3033	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K
R3034	ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M
R3501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R3502	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K
R3503	ERJ6GMYG621	M.RESISTOR CH 1/10W 620
R3504	ERJ6GMYG391	M.RESISTOR CH 1/10W 390
R3506	ER0S2CKG3900	M.RESISTOR 1/4W 390
R4001	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R4002	ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K
R4003	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R4004	ERJ6GMYG241	M.RESISTOR CH 1/10W 240
R4005	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K
R4006	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K
R4007	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K
R4008	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K
R4009	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K
R4010	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K
R4011	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470
R4013	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R4014	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180
R4015	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390
R4016	ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M
R4017	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R4018	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K
R4019	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K
R4020	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K



Ref. No.	Part No.	Part Name
R4021	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K
R4022	ERJ6GMJY561	M.RESISTOR CH 1/10W 560
R4026	ERJ6GMJY472	M.RESISTOR CH 1/10W 4.7K
R4027	ERJ6GMJY332	M.RESISTOR CH 1/10W 3.3K
R4028	ERJ6GMJY272	M.RESISTOR CH 1/10W 2.7K
R4029	ERJ6GMJY332	M.RESISTOR CH 1/10W 3.3K
R4030	ERJ6GMJY822	M.RESISTOR CH 1/10W 8.2K
R4501	ERJ6GMJY683	M.RESISTOR CH 1/10W 68K
R4502	ERJ6GMJY562	M.RESISTOR CH 1/10W 5.6K
R4503	ERJ6GMJY683	M.RESISTOR CH 1/10W 68K
R4504	ERJ6GMJY562	M.RESISTOR CH 1/10W 5.6K
R4506	ERJ6GMJY223	M.RESISTOR CH 1/10W 22K
R4509	ERJ6GMJY683	M.RESISTOR CH 1/10W 68K
R4510	ERJ6GMJY103	M.RESISTOR CH 1/10W 10K
R4511	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K
R4512	ERJ6GMJY683	M.RESISTOR CH 1/10W 68K
R4513	ERJ6GMJY103	M.RESISTOR CH 1/10W 10K
R4514	ERJ6GMJY562	M.RESISTOR CH 1/10W 5.6K
R4515	ERJ6GMJY472	M.RESISTOR CH 1/10W 4.7K
R4516	ERJ6GMJY511	M.RESISTOR CH 1/10W 510
R4517	ERJ6GMJY223	M.RESISTOR CH 1/10W 22K
R4518	ERJ6GMJY223	M.RESISTOR CH 1/10W 22K
R4519	ERJ6GMJY821	M.RESISTOR CH 1/10W 820
R4520	ERJ6GMJY124	M.RESISTOR CH 1/10W 120K
R4521	ERJ6GMJY511	M.RESISTOR CH 1/10W 510
R4522	ERJ6GMJY303	M.RESISTOR CH 1/10W 30K
R4523	ERJ6GMJY472	M.RESISTOR CH 1/10W 4.7K
R4524	ERJ6GMJY102	M.RESISTOR CH 1/10W 1K
R4525	ERJ6GMJY102	M.RESISTOR CH 1/10W 1K
R4527	ERJ6GMJY472	M.RESISTOR CH 1/10W 4.7K
R4528	ERJ6GMJY391	M.RESISTOR CH 1/10W 390
R4529	ERJ6GMJY221	M.RESISTOR CH 1/10W 220
R4530	ERJ6GMJY104	M.RESISTOR CH 1/10W 100K
R4531	ERJ6GMJY221	M.RESISTOR CH 1/10W 220
R4532	ERJ6GMJY104	M.RESISTOR CH 1/10W 100K
R4533	ERJ6GMJY104	M.RESISTOR CH 1/10W 100K
R4534	ERJ6GMJY104	M.RESISTOR CH 1/10W 100K
R4535	ERJ6GMJY221	M.RESISTOR CH 1/10W 220
R4536	ERJ6GMJY221	M.RESISTOR CH 1/10W 220
R4537	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
R4538	ERJ6GMJY102	M.RESISTOR CH 1/10W 1K
R4902	ERDS2TJ471	C.RESISTOR 1/4W 470
R4903	ERJ6GMJY472	M.RESISTOR CH 1/10W 4.7K
R4904	ERJ6GMJY153	M.RESISTOR CH 1/10W 15K
R4905	ERJ6GMJY223	M.RESISTOR CH 1/10W 22K
R4906	ERJ6GMJY331	M.RESISTOR CH 1/10W 330
R4908	ERJ6GMJY750	M.RESISTOR CH 1/10W 75
R4909	ERJ6GMJY223	M.RESISTOR CH 1/10W 22K
R4910	ERJ6GMJY474	M.RESISTOR CH 1/10W 470K
R4911	ERJ6GMJY750	M.RESISTOR CH 1/10W 75
R4912	ERJ6GMJY331	M.RESISTOR CH 1/10W 330
R4913	ERJ6GMJY750	M.RESISTOR CH 1/10W 75
R4914	ERJ6GMJY750	M.RESISTOR CH 1/10W 75
R4915	ERDS2TJ471	C.RESISTOR 1/4W 470
R4916	ERJ6GMJY331	M.RESISTOR CH 1/10W 330
R4918	ERJ6GMJY331	M.RESISTOR CH 1/10W 330
R4926	ERJ6GMJY471	M.RESISTOR CH 1/10W 470

Ref. No.	Part No.	Part Name
R4927	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R4928	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R4938	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R4941	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R4942	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
R4945	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K
R4946	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K
R6001	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K
R6002	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R6003	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K
R6004	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K
R6005	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0
R6008	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K
R6009	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K
R6011	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R6012	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R6013	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R6014	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470
R6015	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470
R6016	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R6017	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R6018	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R6019	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R6020	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K
R6021	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R6022	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R6023	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R6025	ERJ6GMYJ433	M.RESISTOR CH 1/10W 43K
R6026	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K
R6029	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R6030	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R6031	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K
R7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
R7304	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K
R7305	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100
R7305	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K
R7306	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100
R7306	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K
R7307	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K
R7308	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K
R7309	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220
R7311	ERJ6GEYJ752	M.RESISTOR CH 1/10W 7.5K
R7312	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100
R7313	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100
R7314	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K
R7315	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K
R7316	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K
R7317	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
R7318	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0
R7319	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K
R7320	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K
R7324	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220
R7325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0
R7327	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K
R7328	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220

Ref. No.	Part No.	Part Name
R7329	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220
R7501	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K
R7502	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K
R7503	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K
R7504	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K
R7505	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K
R7506	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K
R7508	ERDS2TJ150	C.RESISTOR 1/4W 15
R7509	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75
R7510	ERDS2TJ821	C.RESISTOR 1/4W 820
R7511	ERDS2TJ821	C.RESISTOR 1/4W 820
R7513	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K
R7514	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K
R7515	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K
R7516	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K
R7517	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R7518	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R7519	ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K
R7521	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K
R7533	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K
R7534	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180
R7535	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K
R7537	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K
R7538	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K
R7601	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R7602	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470
R7604	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R7605	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R7606	ERDS2TJ331	C.RESISTOR 1/4W 330
R7607	ERDS2TJ331	C.RESISTOR 1/4W 330
R7608	ERJ6GEYJ151	M.RESISTOR CH 1/10W 150
R7610	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470
R7611	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470
R7613	ERJ6GMYJ151	M.RESISTOR CH 1/10W 150
R7614	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R7615	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
R7701	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R7702	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R7703	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K
R7704	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K
R7705	ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K
R7706	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K
R7707	ERJ6GMYK125	M.RESISTOR CH 1/10W 1.2M
R7708	ERJ6GMYK125	M.RESISTOR CH 1/10W 1.2M
R7709	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K
R7710	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K
R7711	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R7712	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R7713	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R7714	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R7715	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R7716	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K
R7717	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K
R7718	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K
R7719	ERJ6GMYK225	M.RESISTOR CH 1/10W 2.2M
R7720	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K
R7721	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K

Ref. No.	Part No.	Part Name
R7722	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R7723	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K
R7724	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R7725	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220
R7726	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K
R7728	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K
R7729	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R7730	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R7731	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K
R7732	ECUM1H100DCN	C.CAPACITOR CH 50V 10P
R7733	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100
S1501	K0G934A00002	SWITCH
S7501	EVQ11G07K	SWITCH
S7502	EVQ11G07K	SWITCH
S7503	EVQ11404M	SWITCH
S7504	EVQ11404M	SWITCH
S7505	EVQ11L07B	SWITCH
S7506	EVQPC005B	SWITCH
S7507	VES0834	S-TAB SWITCH
S7508	EVQ11G07K	SWITCH
S7511	EVQ11L07B	SWITCH
S7512	EVQ11G07K	SWITCH
S7513	EVQ11L07B	SWITCH
S7514	EVQ11G07K	SWITCH
S7515	EVQ11L07B	SWITCH
T0701	EQV5EC083P	TRANSFORMER
T0701	EQV5EC082P	TRANSFORMER
T1101	ETE28K131AZ	SWITCHING TRANSFORMER
T4002	EQQ7QF024P	TRANSFORMER
TU7601	ENG47317G1	TUNER
TU7601	ENG47318G1	TUNER
TU7601	ENG47316G1	TUNER
VR0701	EVNCBAA00B14	V.RESISTOR
VR7301	EVNCBAA00B14	V.RESISTOR
X0701	VLF1417	FILTER
X0701	VLF1416	FILTER
X0704	VLF1495	FILTER
X0704	VLF1493	FILTER
X3001	VSX0162	CRYSTAL OSCILLATOR
X6001	VSX0660	CRYSTAL OSCILLATOR
X6002	H0D200500014	CRYSTAL OSCILLATOR
X7301	VSX1086	CRYSTAL OSCILLATOR
X7302	VSX0953	CRYSTAL OSCILLATOR
		MISCELLANEOUS
	TP00351-51	FUSE HOLDER
	TP00351-51	FUSE HOLDER
	VSC4999	HA CASE (A)
	VSC4998	HA ANGLE

Ref. No.	Part No.	Part Name
	VSC4752	SHIELD CASE (MAIN)
	VMP4894	SUPPORT ANGLE
	VMP5897	CONNECTING ANGLE
bl	-----	CYLINDER STATOR C.B.A.
		MISCELLANEOUS
	HW-300A-DF	HALL IC
	VJS3537B009G	CONNECTOR (FEMALE) 9P

2

00

00

2 03 00

2 03 00

0

00

00

2

00

00

2

00

00

2 1 1 00

2 1 1 00

DECODER PACK C.B.A.
(EG/EGY)
NICAM DECODER
PACK C.B.A.
(B/BL/EC/ECM/ECN/ECY)

TV DEMODULATOR PACK C.B.A.

MAIN C.B.A.

