# STEREO RECEIVER RX-396/496 SERVICE MANUAL

#### **IMPORTANT NOTICE**

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

**WARNING:** Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

**IMPORTANT:** The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING:

ING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

**IMPORTANT:** Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

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# TO SERVICE PERSONNEL

- 1. Critical Components Information. Components having special characteristics are marked  $\triangle$  and must be replaced with parts having specifications equal to those originally installed.
- 2. Leakage Current Measurement (For 120V Models Only). When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.
- Meter impedance should be equivalent to 1500 ohm shunted by 0.15μF.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



"CAUTION"

"F101 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 5.0A, 125V FUSE." CAUTION

F101 : REPLACE WITH SAME TYPE 5.0A, 125V FUSE.

#### ATTENTION

F101 : UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE 5.0A, 125V.

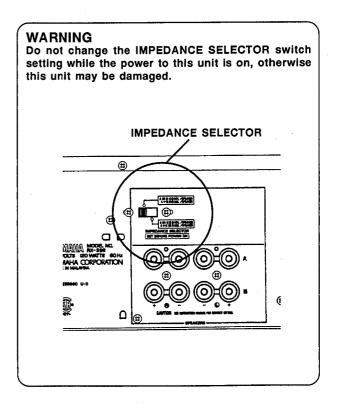
# WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

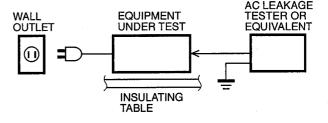
DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

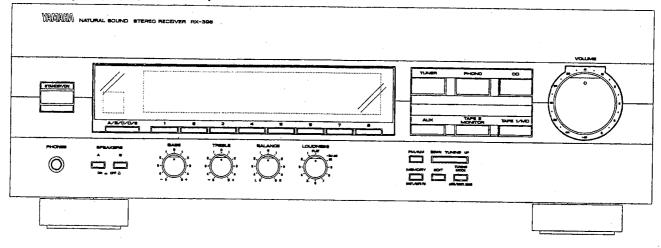


1

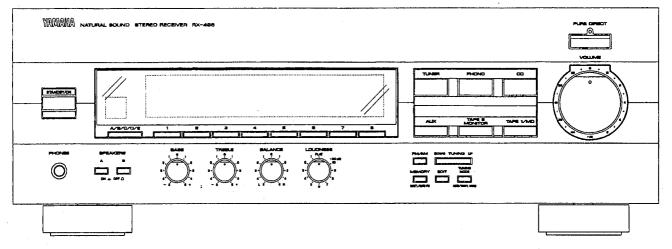


## **FRONT PANELS**

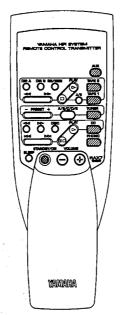
#### ▼ RX-396 (U, C, R, A, G models)

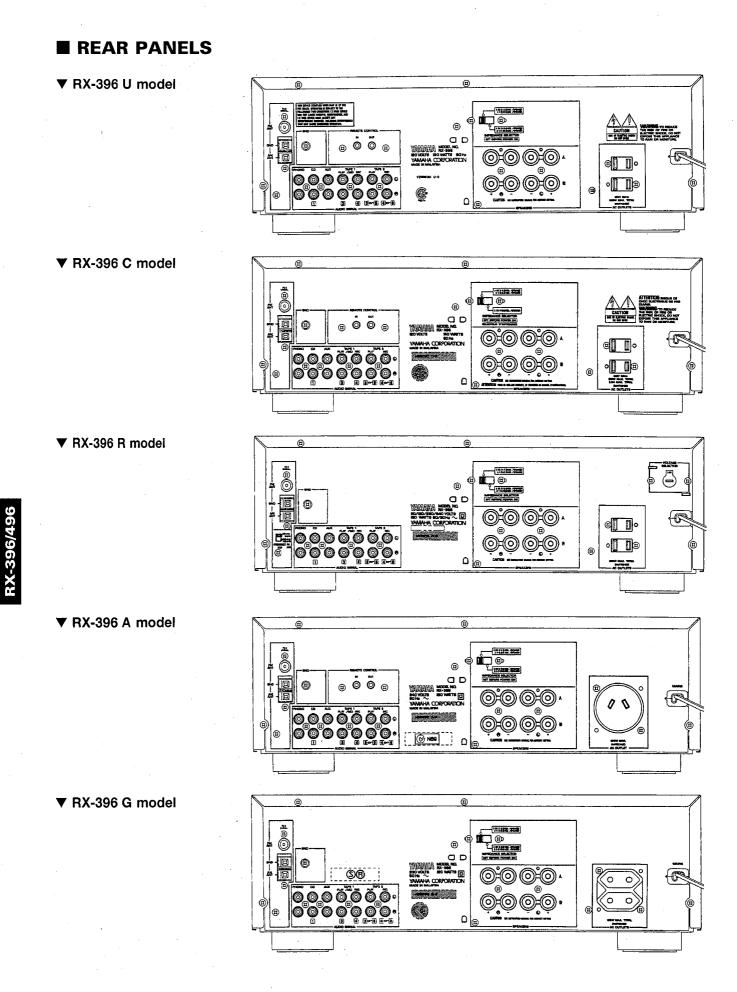


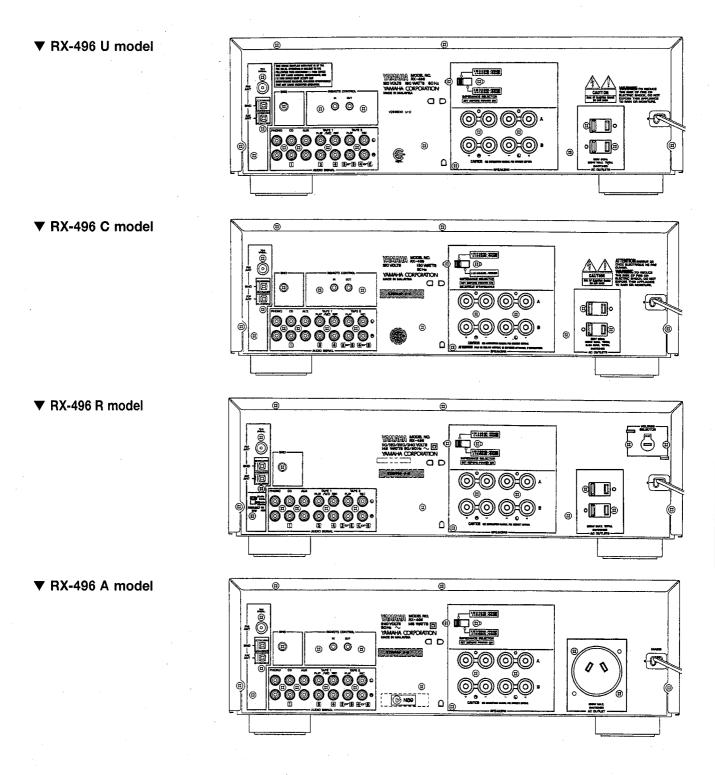
### ▼ RX-496 (U, C, R, A models)



#### ▼ RX-396/496







# SPECIFICATIONS

Minimum RMS Output Power per Channel
RX-396
20Hz to 20kHz, 0.04% THD, 8Ω
RX-496
20Hz to 20kHz, 0.04% THD, 8 $\Omega$
Maximum Power per Channel (EIAJ)
RX-396 (R model only)
1kHz, 10% THD, 8Ω70W
RX-496 (R model only)
1kHz, 10% THD, 8Ω
Dynamic Power per Channel (IHF)
RX-396
8/6/4/2Ω
RX-496
8/6/4/2Ω 105/125/150/178W
DIN Standard Output Power per Channel
RX-396 (G model only)
1kHz, 0.7% THD, 4Ω
IEC Power
RX-396 (G model only) 1kHz, 0.04% THD, 8Ω52W
Power Band Width
RX-396
0.08% THD, 22.5W, 8Ω 10Hz to 50kHz
RX-496
0.08% THD, 35W, 8Ω 10Hz to 50kHz
Damping Factor
20Hz to 20kHz, 8Ω
Input Sensitivity/Impedance
PHONO MM
CD, etc
Maximum Input Signal Level (1kHz, 0.04% THD)
PHONO MM
Output Level
REC OUT
Headphone Jack Rated Output/Impedance
RX-396
0.04% THD, 8Ω 0.47V/330Ω
RX-496
0.04% THD, 8Ω 0.49V/390Ω
Frequency Response (20Hz to 20kHz)
CD, etc0±0.5dB
RIAA Equalization Deviation (20Hz to 20kHz)
PHONO MM0±0.5dB
Total Harmonic Distortion (20Hz to 20kHz)
PHONO MM to REC OUT (1V) 0.02%
CD, etc, to SP OUT (35W/8Ω) 0.02%
Signal-to-Noise Ratio (IHF-A-Network)
PHONO MM, Input Shorted (5mV) 82dB
CD, etc, Input Shorted
Residual Noise (IHF-A-Network) 100µV
Channel Separation (Vol. – 30dB)
CD, etc, Input 5.1kΩ Shorted, 1kHz
Tone Control Characteristics
BASS : Boost/cut ±10dB (50Hz)
Turnover Frequency
TREBLE : Boost/cut ±10dB (20kHz)
Turnover Frequency
Continuous Loudness Control 30dB (1kHz)
(Level related equalization)

FM SECTION
Tuning Range
U, C models
A, G models
R model
50dB Quieting Sensitivity (IHF, 75 Ω)
U, C, R, A models only
Mono 1.55μV (15.1dBf)
Stereo 1kHz, 100% mod 21µV (37.7dBf)
Usable Sensitivity (75 Ω)
1kHz 100% mod. (30dB S/N Quieting)
U, C, R, A models0.8µV (9.3dBf)
DIN, Mono (S/N 26dB) G model
DIN, Stereo (S/N 46dB) G model 24µV
Image Response Ratio
U, C, R, A models 45dB
G model
IF Response Ratio 80dB
Spurious Response Ratio
AM Suppression Ratio
Capture Ratio 1.5dB
Signal-to-Noise Ratio
Mono/Stereo (IHF)
U, C, R, A models80/75dB
Mono/Stereo (DIN-weighted)
G model (40kHz Dev.)
Harmonic Distortion (1kHz)
Mono/Stereo
U, C, R, A models 0.1/0.2%
Mono/Stereo
G model (40kHz Dev.) 0.1/0.2%
Stereo Separation (1kHz)
U, C, R, A models 50dB
G model (40kHz Dev.) 50dB
Frequency Response
20Hz to 15kHz 0 ± 1.5dB
Output Level/Impedance
FM (100% mod.), 1kHz
U, C, R, A models 500mV/2.2kΩ
G model (40kHz Dev.) 500mV/2.2kΩ

#### AM SECTION

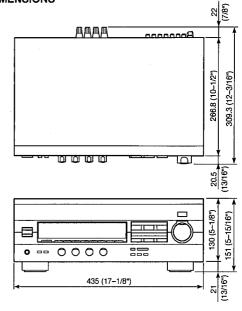
Tuning Range
U, C models
A, G models
R model 530 to 1710/531 to 1611kHz
Usable Sensitivity 100µV/m
Selectivity 32dB
Signal-to-Noise Ratio 50dB
Image Response Ratio 40dB
Spurious Response Ratio 50dB
Harmonic Distortion (1kHz) 0.3%
Output Level/Impedance
AM (30% mod., 1kHz) 150mV/2.2kΩ

GENERAL	
Power Supply	
U, C models	AC 120V, 60Hz
A model	AC 240V, 50Hz
G model	AC 230V, 50Hz
R models	. AC 110/120/220/240V, 50/60Hz
Power Consumption	
RX-396	
U model	
C model	
R, A, G models	
RX-496	
U model	
C model	
R, A models	
AC Outlets	
U, C, R, G models	
Switched x 2	100W max (Total)
A model	
	100W max
Dimensions (W x H x D)	
	(17-1/8" x 5-15/16" x 12-3/16")
Weight	
RX-396	6.4 kg (14 lbs. 1 oz)
RX-496	8.2 kg (18 lbs. 1 oz)
Accessories	AM loop antenna x 1
	Indoor FM antenna x 1
	Remote Control Transmitter x 1
	Battery (size "AA", "R06") x 2
* Specifications subject to char	nge without notice.
U USA model	G European model
C Canadian model	R General model

)

C ...... Canadian model A ...... Australian model

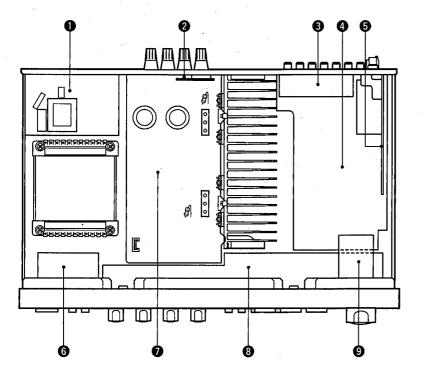
• DIMENSIONS



Units : mm (inch)

6

### INTERNAL VIEW



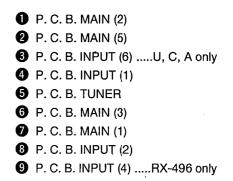


Fig. 1

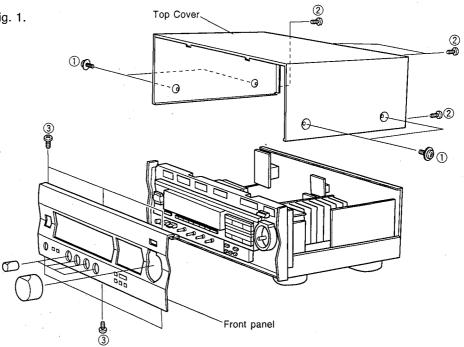
#### ■ DISASSEMBLY PROCEDURES (Remove parts in disassembly order as numbered.)

#### 1. Removal of Top Cover

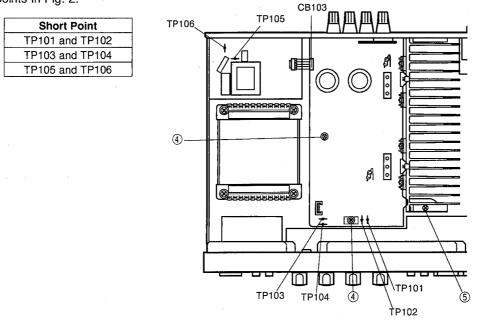
a. Remove 4 screws ( 1) and 4 screws ( 2) in Fig. 1.

#### 2. Removal of Front Panel

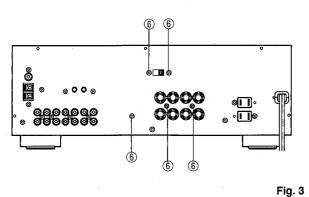
- a. Remove the knobs.
- b. Remove 6 screws ( 3 ) in Fig. 1.

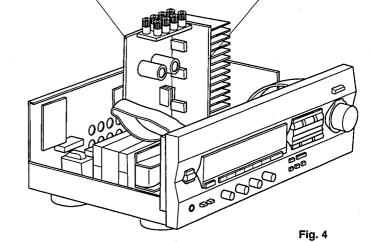


- 3. Checking and Parts Replacement of Main Unit
- a. Disconnect the power cord from the AC outlet.
- b. Remove 2 screws ( 4 ) and 1 screw ( 5 ) in Fig. 2.
- c. Detach 1 connector terminal (CB103) in Fig. 2.
- d. Operating checks can be taken by shorting between the following test points in Fig. 2.



- e. Remove 5 screws ( 6 ) in Fig. 3.
- f. Place the Main Unit on its side as shown in Fig. 4.
- g. Connect the power cord and turn ON the POWER switch.





MAIN P.C.B. (1)

Fig. 2

Main Unit

## TEST MODE

**CAUTION :** Before setting to the TEST mode, write down the existing preset memory content of the Tuner in a table as shown below. (This is because setting to the TEST mode will cause the memory content to be as factory set, i.e., all the preset memory by the user will be erased.)

Preset group	P1	P2	P3	P4	P5	P6	P7	P8
A								
B								
C							_	
D								
E								

Factory preset memory content

#### How to start

Turn the POWER switch ON while pressing the CD and PRESET STATION No. 8 keys simultaneously. The unit enters the TEST mode for the display check (All display segments light immediately).

#### How to cancel

Normal operation is restored when the POWER switch is turned OFF. At the same time, the factory preset, memory is also restored.

Preset group	P1	P2	P3	P4	
A/C/E	87.5MHz	90.1MHz	95.1MHz	98.1MHz	
B/D	630kHz	1080kHz	1440kHz	530kHz (U, C, R) 531kHz (R, A, G)	
Preset group	P5	P6	P7	P8	
A/C/E	108MHz	88.1MHz	106.1MHz	108MHz	
	1710kHz (U, C, R)	900kHz	1350kHz	1400kHz (U, C, R)	

For all the above, AUTO TUNING and AUTO STEREO are selected as the TUNING mode.

## PROTECTION OPERATION CHECK FUNCTION

1. Turn the POWER switch ON while pressing the AUX and PRESET STATION No. 8 keys simultaneously, and the protection operation mode and the microprocessor AD input value are displayed for 3 seconds.

Example :	PRT-PS
	PRT-DC

[AD value]

[PRT-PS] indicates detection of an abnormal DC value from the amplifier.

[PRT-DC] indicates detection of an abnormal overcurrent from the amplifier.

[PRT-NON] indicates no detection.

When the PRESET STATION No. 8 key is pressed during the above display, the input data are retained till they are cleared. ("PRT-NON" appears on display when the data are cleared.)

2. Turn the POWER switch ON while pressing the AUX and the PRESET STATION No. 7 keys simultaneously, and the input value for detection of an abnormal amplifier DC will be displayed.

Example : DC - [AD value]

[DC-] indicates detection of an abnormal amplifier DC.

Type of protection	Normal (AD value)	Abnormal (AD value)
Detection of an abnormal amplifier DC	128 - 255	0 - 127

Press any key, and the display will be canceled.

Cut OFF

R131 (L ch) R132 (R ch)

# AMP ADJUSTMENTS

#### • Confirmation of Idling Current

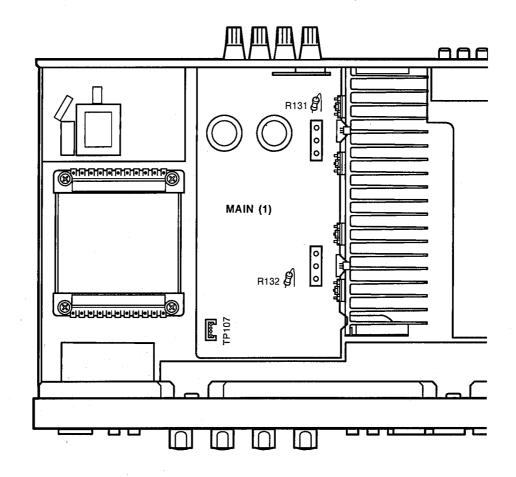
- 1) No signal applied.
- 2) Non-loaded condition.

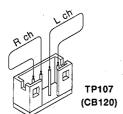
3) Aging is not neccessary.

ltem	Test Point	Rating (DC)	Note
MAIN L MAIN R	TP107 (CB120)	0.05mV~2.5mV	If the measured voltage exceeds 2.6mV, cut the lead wire of R131(L ch) or R132(R ch) and then check again if each measured value satisfies the rating.

#### Note)

- If R131(L ch) or R132(R ch) have already been cut off and idling current does not flow, reconnect R131(1kΩ) or R132(1kΩ).
- Q107 and Q108 are transistors for temperature correction. Apply silicone grease to the contact surface with the heat sink.



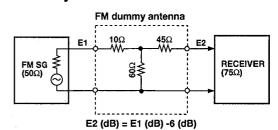


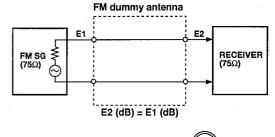
## TUNER ADJUSTMENTS

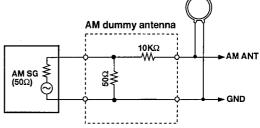
Measuring Instruments

FM signal generator (FM SG) Stereo signal generator (SSG) AM signal generator (AM SG) Distortion meter (DIST. M) AC voltmeter (ACVM) DC voltmeter (DCVM) Oscilloscope Low pass filter (YLF-15, fc=15kHz) Oscillator

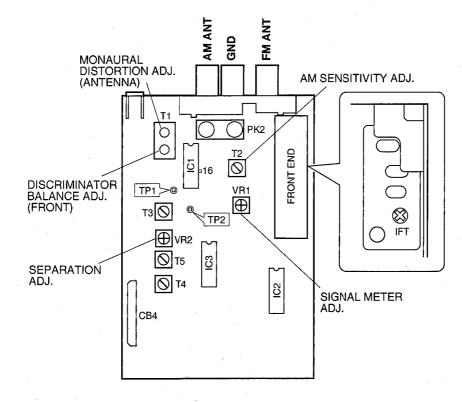
#### Dummy antenna







Test point



Oscilloscope

ACVM

DIST. M

Oscilloscope

ACVM

DIST. M

#### FM Adjustment

#### Before Adjustment

- 1) For dB, 1μV=0dBμ Example : 60dBμ=1mV
- 2) 100% modulation means that the frequency deviation is  $\pm$  75kHz.

Connection diagram (Measuring instruments)

- 3) Install the Matching Transformer and connect FM SG.4) Set each switch to the following position unless otherwise specified.
  - INPUT SELECTOR ...... TUNER TUNING MODE ...... AUTO

#### 3) Stereo distortion adjustment/separation adjustment

TUNER

P. C., B.

TUNER

P. C. B.

R

REC

OUT

R

REC

OUT

YLF-15

(LPF)

FM

FM

dummy

antenna

4) Sensitivity Verification

FM

dummy

antenna

FΜ

SG

SSG

FM

SG

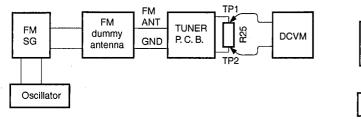
ANT

GND

FM

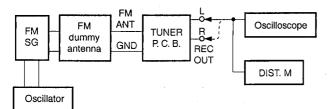
ANT

GND



#### 2) Monaural distortion adjustment

1) Discriminator balance adjustment



#### See page 11 for TP locations & adjustment points.

Step	Adjustment item	Signal (ANT IN)	Reception frequency	Adjustment point	Test point	Rating
1	Rough adjustment of discriminator balance	FM ANT (75Ω) 98.1MHz ** 70dBμ MONO 1kHz 100% modulation	98.1MHz * (A-4)	T1 (Front side core)	Both ends of R25 (Between TP1 and TP2)	DC 0V±100mV
2	Rough adjustment of monaural distortion	Same as Step 1.	98.1MHz * (A-4)	T1 (Antenna side core)	REC OUT L, R	Minimize the dis- tortion.
3	Fine adjustment of discriminator balance	Same as Step 1.	98.1MHz * (A-4)	T1 (Front side core)	Both ends of R25 (Between TP1 and TP2)	DC 0V±50mV
4	Fine adjustment of monaural distortion	Same as Step 1.	98.1MHz * (A-4)	T1 (Antenna side core)	REC OUT L, R	Minimize the dis- tortion (to 0.25% or less).
5	Verification of dis- criminator balance	Same as Step 1.	98.1MHz * (A-4)	T1 (Front side core)	Both ends of R25 (Between TP1 and TP2)	DC 0V±50mV

\* : Execution of FACTORY PRESET (Refer to page 9.) will facilitate setting reception frequency for adjustment.

\*\* Must be 98.1MHz ± 5kHz

Step	Adjustment item	Signal (ANT IN)	Reception frequency	Adjusted point	Test point	Rating
6	Adjustment of front end IFT	FM ANT (75Ω) 98.1MHz 30dBμ MONO 1kHz, 100% modulation	98.1MHz * (A-4)	Front end IFT	Pin 16 of IC1	Adjust so that the DC voltage is maximum. CAUTION : Over-adjustment of the IFT core will reduce the sensitivity. Maximum ±90°
7	Verification of monau- ral distortion	FM ANT (75Ω) 98.1MHz 70dBμ MONO 1kHz, 100% modulation	98.1MHz * (A-4)		REC OUT L, R	0.4% or less
8	Verification of stereo distortion	FM ANT (75Ω) 98.1MHz 70dBμ Stereo L or R 1kHz, 100% modulation	98.1MHz * (A-4) * Tuning mode should be AUTO.		REC OUT L, R	1% or less • STEREO indicator should light.
9	Verification of sensi- tivity	FM ANT (75Ω) 88.1MHz 98.1MHz 106.1MHz MONO 1kHz Modulation off	88.1MHz * (A-6) 98.1MHz * (A-4) 106.1MHz * (A-7)		ΑΝΤ (75Ω)	<ol> <li>Set the tuning mode to MAN'L MONO. (Muting OFF)</li> <li>S/N should be 30dB at each frequency of 88.1MHz, 98.1MHz, and 106.1MHz.</li> <li>Check to ensure that the voltage at the ANT terminal is 3dBµ (14.25dBf) or less.</li> </ol>
10	Adjustment of Separation	FM ANT (75Ω) 98.1MHz 70dBμ Stereo L or R 1kHz, 100% modulation	98.1MHz * (A-4)	VR2	REC OUT L, R	(G only : 6dBµ or less) With SSG output at L or R, the signal leakage level at the other channel should be mini- mized. 36dB or more
11	Adjustment of Signal meter	FM ANT (75Ω) 98.1MHz 45dBμ MONO 1kHz 30% modulation -10dBμ or less	98.1MHz * (A-4)	VR1	· · · · · · · · · · · · · · · · · · ·	Adjust so that all segments light. Check to ensure that signal
12	Verification of auto tuning	FM ANT (75Ω) 98.1MHz 23dBμ Stereo L or R 1kHz, 30% modulation	98.1MHz			<ul> <li>meters turn OFF.</li> <li>Automatic reception should be available when the tuning key is moved UP and DOWN.</li> <li>The stereo indicator should light.</li> <li>Audio muting should be ap- plied during tuning.</li> </ul>

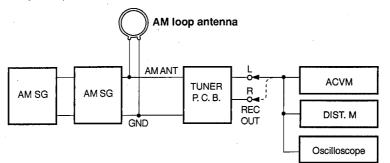
\* : Execution of FACTORY PRESET (Refer to page 9.) will facilitate setting reception frequency for adjustment.

• •

#### AM Adjustment (This should be done after FM adjustment.)

#### • Connection Diagram (Measuring instruments)

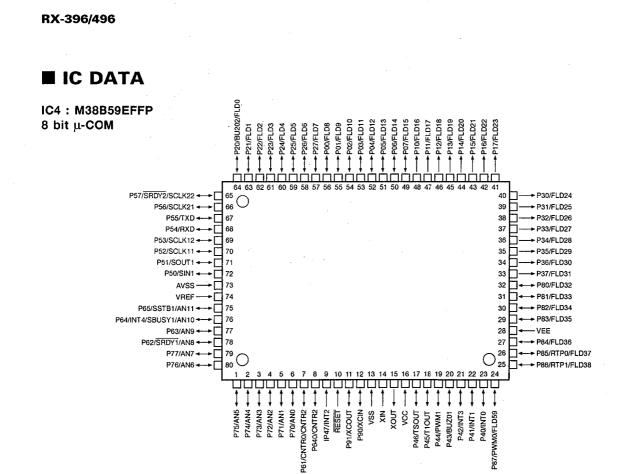
1) Adjustment of sensitivity



#### See page 11 for TP locations & adjustment points.

Step	Adjustment item	Signal (ANT IN)	Reception frequency	Adjustment point	Test point	Rating
1	Adjustment of	AM ANT	1440kHz	T2	REC OUT	Audio output should be
	sensitivity	1440kHz	* (B-3)			maximized.
	(1440Hz)	50dBμ				
		1kHz				
		30% modulation				
2	Verification of	AM ANT	630kHz	T2	REC OUT	Audio output should be
	sensitivity	630kHz	* (B-1)			maximized.
	(630kHz)	50dBµ				Repeat the Step 1 and 2.
		1kHz				
		30% modulation				
3	Verification of	AM ANT	630kHz		AM ANT	Distortion should be 10% or less at
	sensitivity	630kHz	* (B-1)			each frequency.
		1080kHz	1080kHz			Check to ensure that the voltage at
		1440kHz	* (B-2)			the ANT terminal is $54dB\mu$ or less.
		30% modulation	1440kHz			
			* (B-3)			
4	Verification of auto	AM ANT				Auto reception should be avail-
	tuning	60dBµ				able when the tuning key is moved
						UP and DOWN.

\*: Execution of FACTORY PRESET (Refer to page 9.) will facilitate setting reception frequency for adjustment.



Pin No.	Port	1/0		Function	
1	P75		KEY AD IN 4	(A-D)	
2	P74	-	KEY AD IN 3	(A-D)	
3	P73	1	KEY AD IN 2	(A-D)	
4	P72	!	KEY AD IN 1	(A-D)	
5	P71	1	PROTECTION 1 DETECT	(A-D)	
6	P70		PROTECTION 2 DETECT	(A-D)	
7	P61	0	Full mute	[L : ON]	
8	P60	0	OPEN		
9	P47	I	REMOTE CONTROL IN		
10	/RES	Ι	RESET		
11	P91	Ι	V2 market		
12	P90	-	V1 market		
13	VSS	1	GND		
14	XIN		4MHZ		
15	XOUT	0	4MHZ		
16	VCC	1	+ 5V		
17	P46	0	OPEN		
18	P45	0	OPEN		
19	P44	0	OPEN		
20	P43	0	OPEN		
21	P42	0	OPEN		
22	P41	I	Power down detect	[L : DOWN]	
23	P40		START IN RDS	(INTO)	
24	P87	0	OPEN	[L : ON]	
25	P86	0	OPEN	[L : ON]	
26	P85	0	Volume up out		
27	P84	0	Volume down out		

#### Protection 1 (5 pin)

Detection of an abnormal amplifier DC. Normal when AD value 128 - 255. Detection starts 2 seconds after the power is turned ON.

### Protection 2 (6 pin)

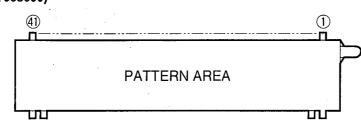
Detection of an abnormal amplifier overcurrent. Abnormality detected at H. Detection starts after the power is turned ON.

# IC4 : M38B59EFFP 8 bit $\mu$ -COM

Pin No.	Port	I/O	·	Function
28	VEE	10	- 25V	
29	P83		POWER switch in	[H : ON]
30	P82	0	OPEN	
31	P81	0	SPEAKER RELAY OUT (MAIN)	[H : ON]
32	P80	0	POWER RELAY OUT	[H : ON]
33	P37	0	OPEN	[H : ON]
34	P36	0	OPEN	[H : ON]
35	P35	0	OPEN	[H : ON]
36	P34	0	FL SEGMENT 4	[H : ON]
37	P33	ŏ	FL SEGMENT 5	[H : ON]
38	P32	0	FL SEGMENT 6	[H : ON]
39	P31	Ō	FL SEGMENT 7	[H : ON]
40	P30	0	FL SEGMENT 8	[H : ON]
41	P17	Ō	FL SEGMENT 9	[H : ON]
42	P16	0	FL SEGMENT 10	[H : ON]
43	P15	0	FL SEGMENT 11	[H : ON]
44	P14	0	FL SEGMENT 12	[H : ON]
45	P13	0	FL SEGMENT 13	[H : ON]
46	P12	0	FL SEGMENT 14	[H : ON]
47	P11	Ō	FL SEGMENT 15	[H : ON]
48	P10	0	FL SEGMENT 16	[H : ON]
49	P07	Ō	FL DIGIT 12	[H : ON]
50	P06	0	FL DIGIT 11	[H : ON]
51	P05	0	FL DIGIT 10	[H : ON]
52	P04	Ō	FL DIGIT 9	[H : ON]
53	P03	0	FL DIGIT 8	[H : ON]
54	P02	0	FL DIGIT 7	[H : ON]
55	P01	0	FL DIGIT 6	[H : ON]
56	P00	0	FL DIGIT 5	[H : ON]
57	P27	0	FL DIGIT 4	[H : ON]
58	P26	0	FL DIGIT 3	[H : ON]
59	P25	0	FL DIGIT 2	[H : ON]
60	P24	0	FL DIGIT 1	[H : ON]
61	P23	0	Not used	(GND)
62	P22	0	Not used	(GND)
63	P21	0	Not used	(GND)
64	P20	0	Not used	(GND)
65	P57	0	CE INPUT out	
66	P56	0	Serial clock out	·
67	P55	0	Serial data out	
68	P54	<u> </u>	DO IN for tuner	
69	P53	0	OPEN	
70	P52	1/0	RDS serial clock in	· · · · · · · · · · · · · · · · · · ·
71	P51		OPEN	
72	P50	1/0	RDS serial data in	
73	AVSS		GND	[H : ON]
74	VREF	$\left  \frac{1}{2} \right $	+ 5V	<i>(U. DDO)</i>
75	P65		OPEN	[H : RDS]
76	P64	0	TMUTE for tuner	[L : ON]
77	P63		/ST for tuner	[L : stereo]
78	P62	0	CE TUN for tuner	
79	P77			
80	P76	0	OPEN	

# DISPLAY DATA

• V1 : 13-BT-140GK (VT668600)

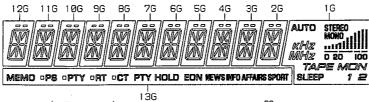


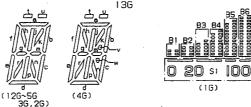
#### • PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	- 8	9	10	11	12	13	14	15	16	17	18	19	20	21
CONNECTION	F1	F1	NP	NP	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	Р3	P2	P1	NX
PIN NO.	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
CONNECTION	NX	NX	NX	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	NP	NP	F2	F2	

NOTE 1) F1, F2 ...... Filament 2) NP ...... No pin 3) NC ...... No connection 4) NX ...... No extend pin
 5) P1~P16 ..... Datum Line
 6) 1G~13G .... Grid

#### GRID ASSIGNMENT

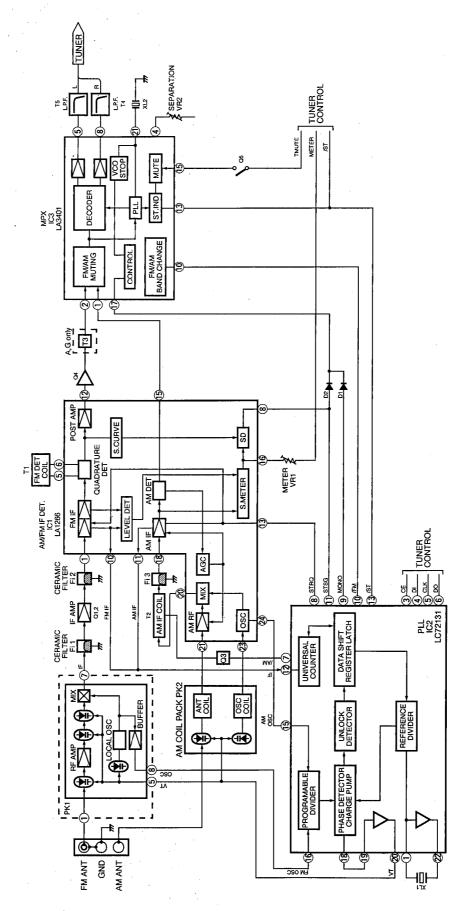




#### ANODE CONNECTION

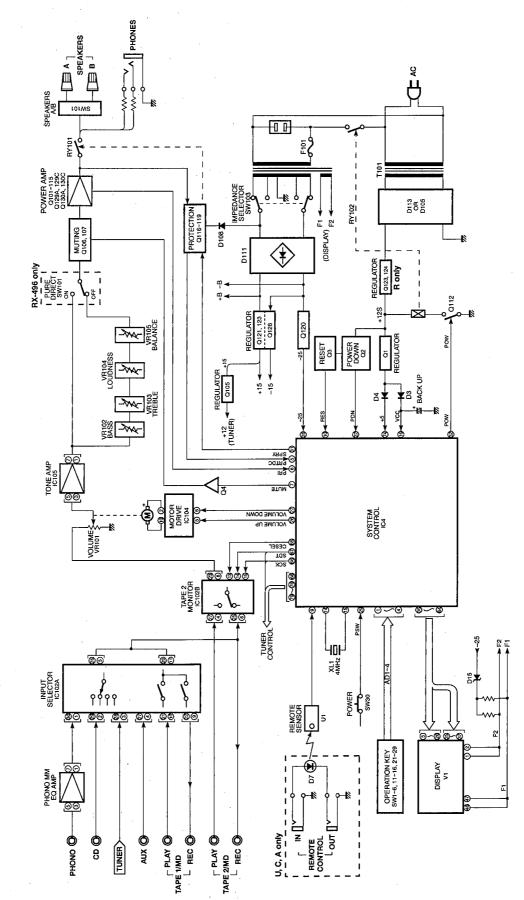
$\backslash$	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	SPORT	а	а	a	a	а	а	а	а	а	а	а	AUTO
P2	AFFAIRS	b	b	b	b	b	b	b	b	b	b	b	kHz
P3	INFO	С	с	С	с	с	C	C.	с	с	С	C	MHz
P4	NEWS	d	d	d	d	d	d	d	d	d	d	d	STEREO
P5	EON	е	е	e	е	е	е	е	е	е	е	е	MONO
P6	PTY HOLD	, f.,	f	f,	f	f	f	f	f	f	f	f	B1
P7	СТ	g	g	g	g	g	g	g	g	g	g	g	B2
P8	□(СТ)	h	h	h	h.	h	h	h	h	h	h	h	B3
P9	RT	j.	j	j	j	j	j	j	j	j	j	j	B4
P10	□ (RT)	k	k	k	k	k	k	k	k	, k	k j	k	B5
P11	RTY	m	. m	m	m	m	m	m	m	m	m	m	B6
P12	(RTY)	n	n	n	n	n	n	n	n	n	n	n	S1
P13	PS	р	р	р	р	p	р	р	р	р	р	р	TAPE MON
P14	<sup>.</sup> □ (RS)	r	r	r .	r	r	r	r	r	r	r	r	1
P15	мемо	t, u	t, u	t, u	t, u	t, u	t, u	t, u	t, u	t, u	t, u	t, u	2
P16		_	<u>.</u>			_				v, w	_	_	SLEEP

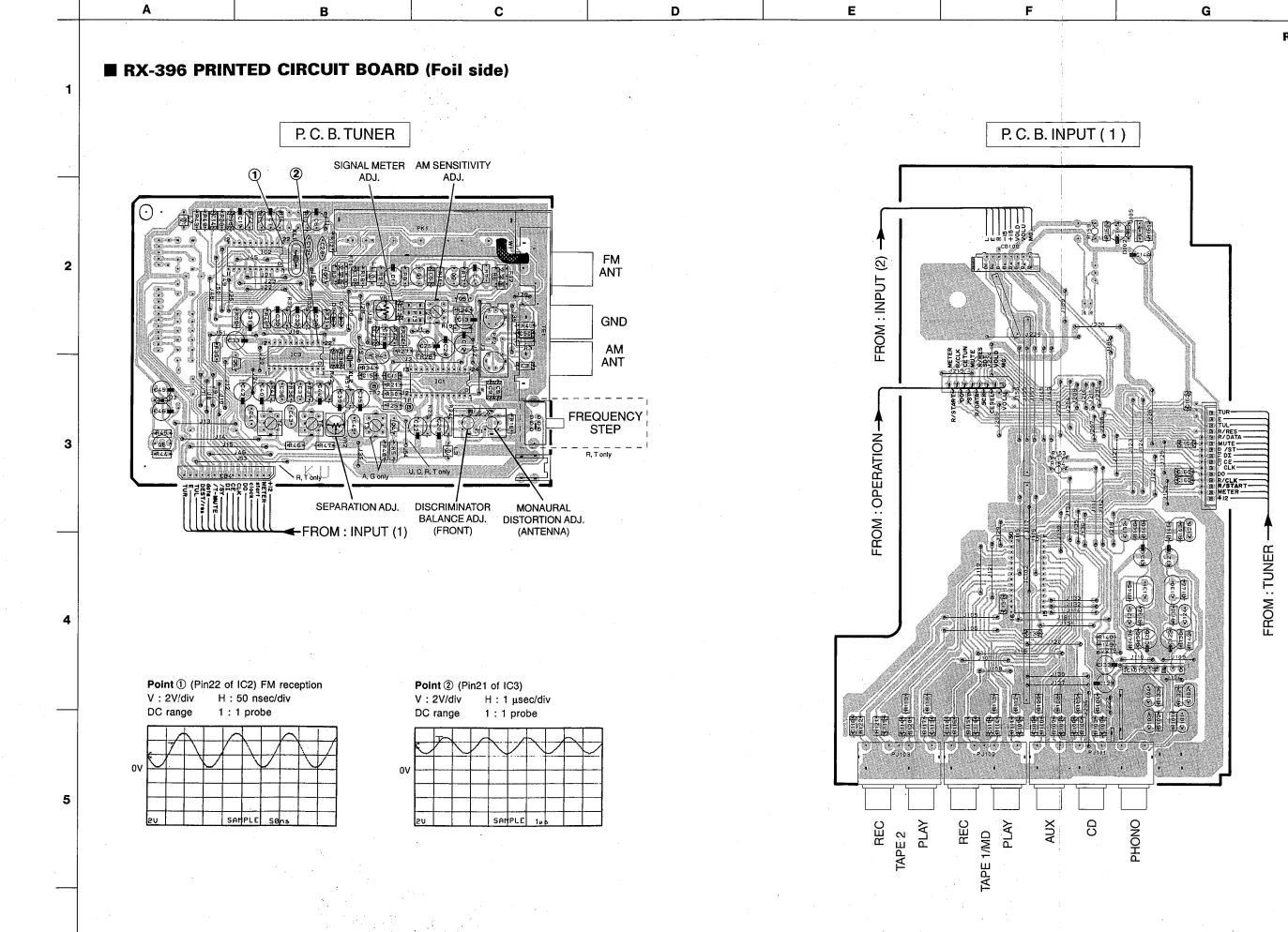
BLOCK DIAGRAM



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BLOCK DIAGRAM





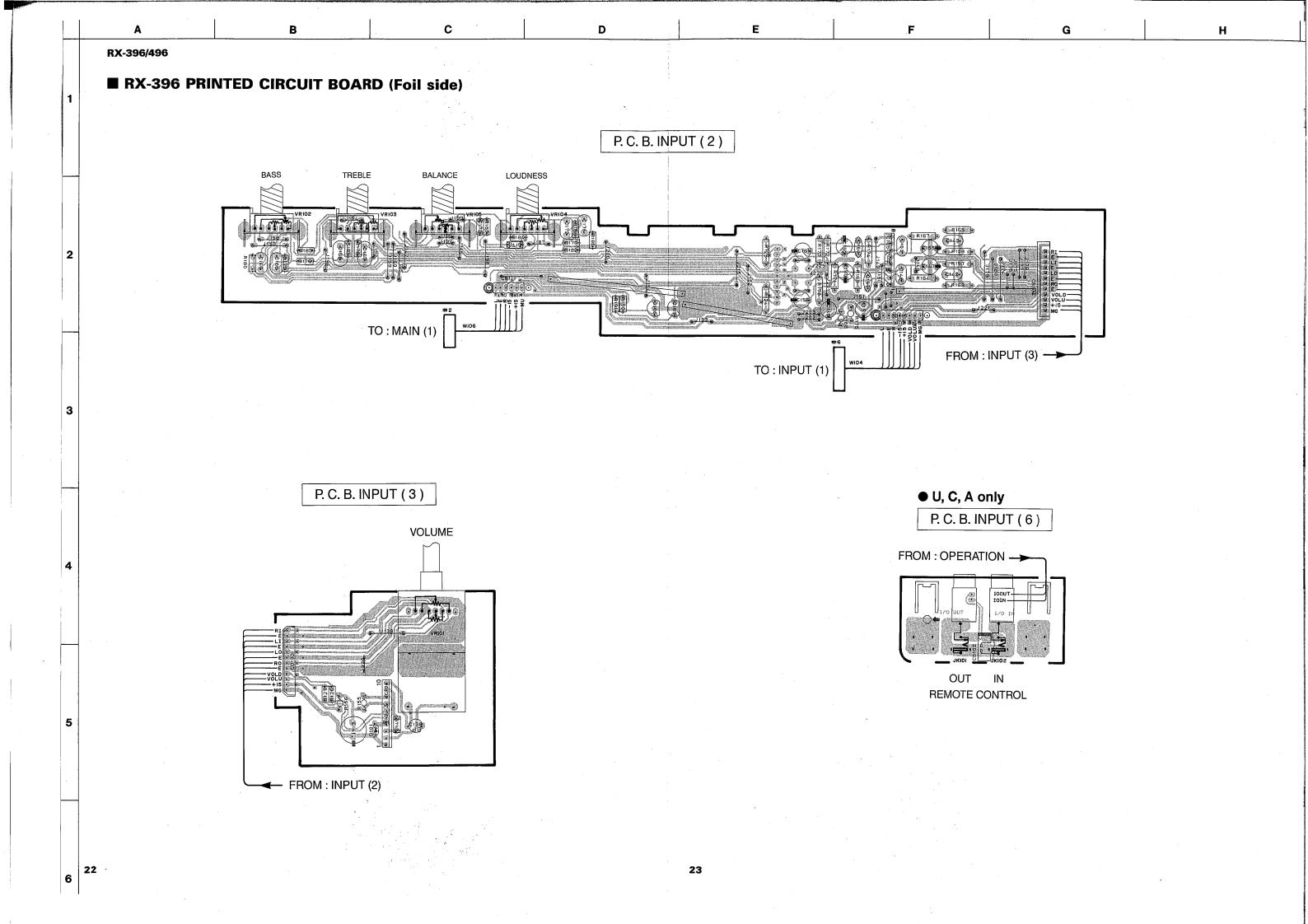
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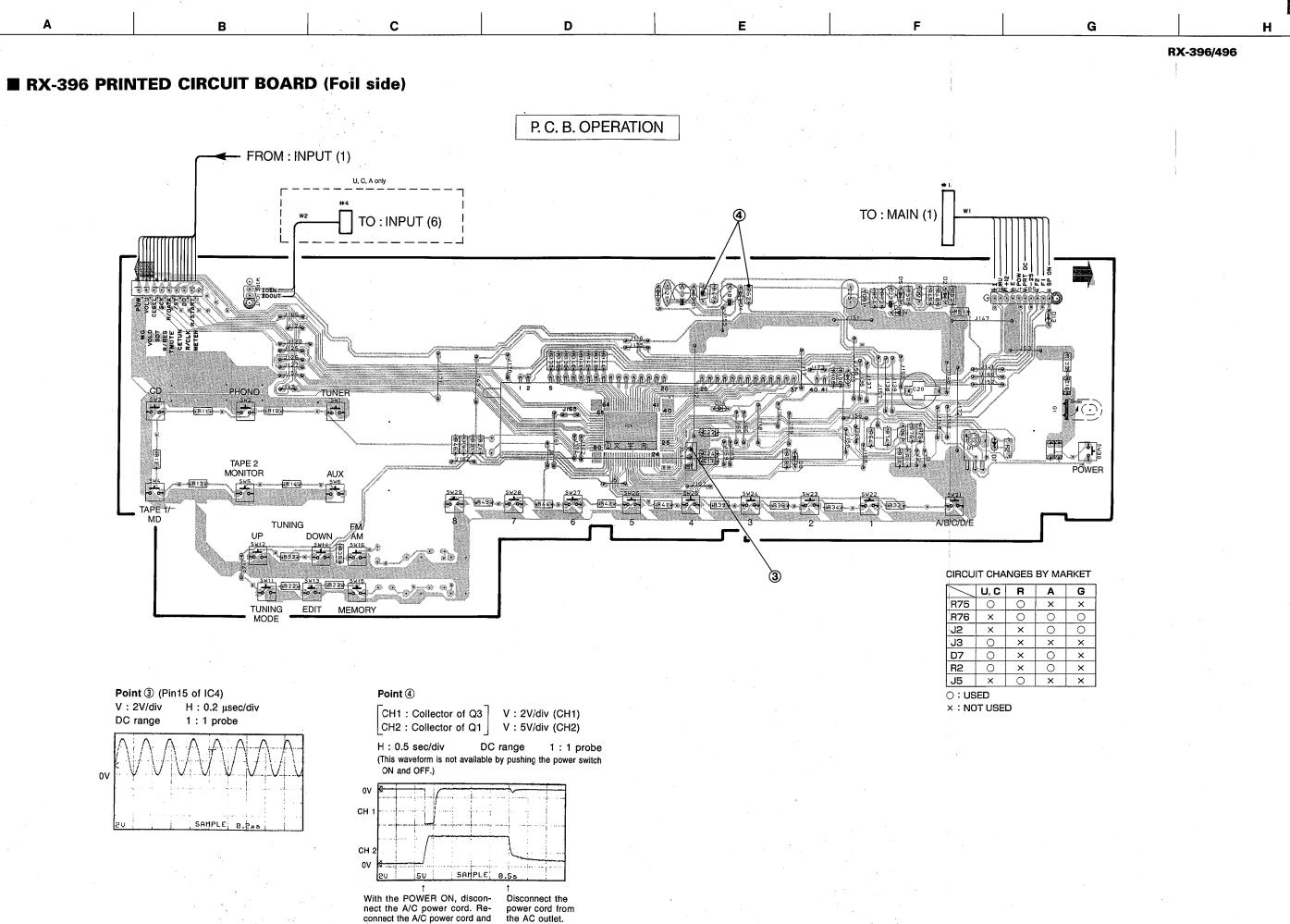
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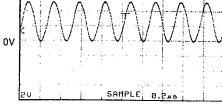
RX-396/496

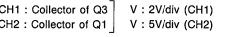
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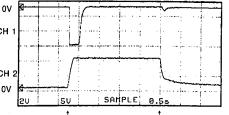
21







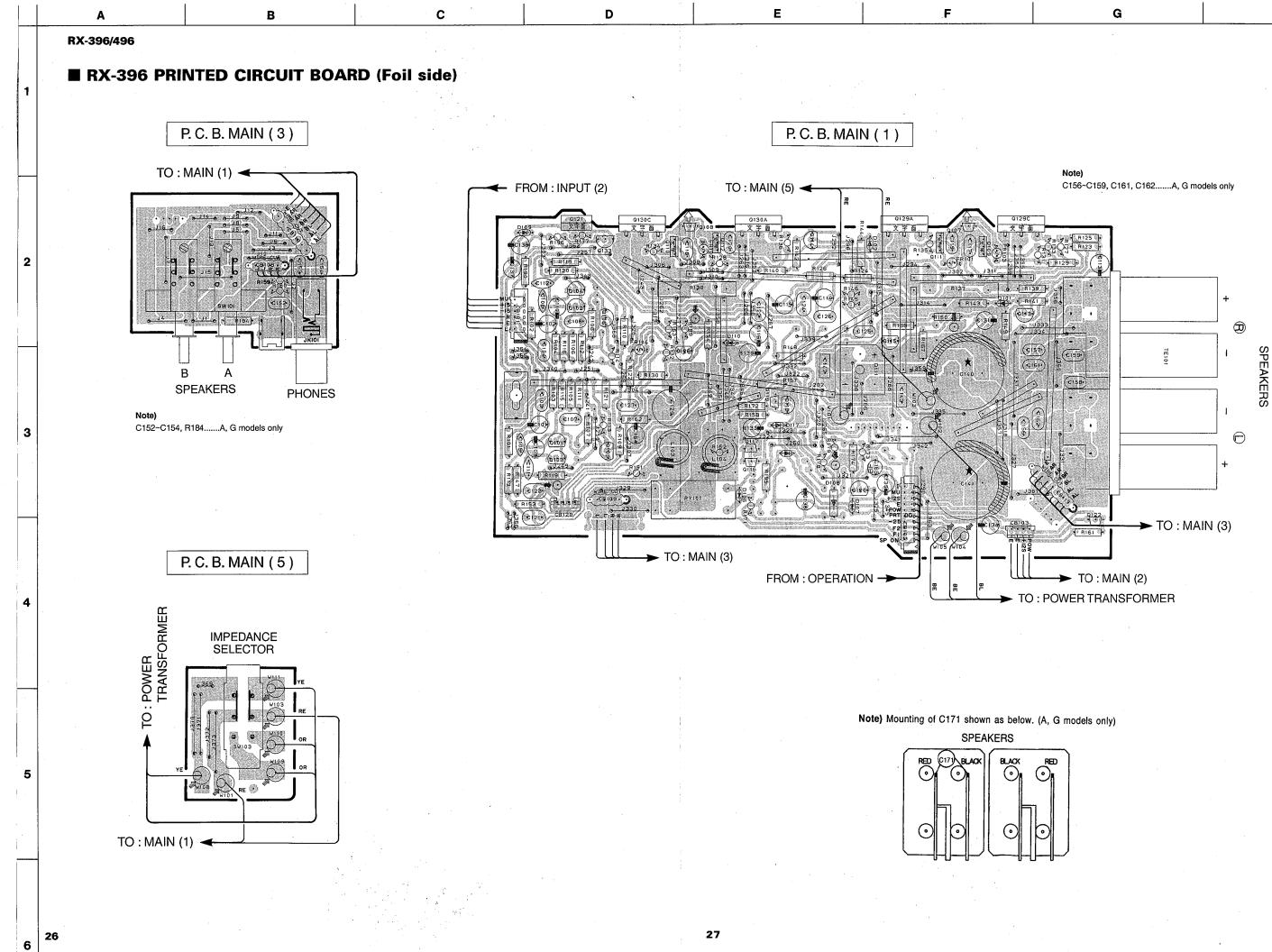




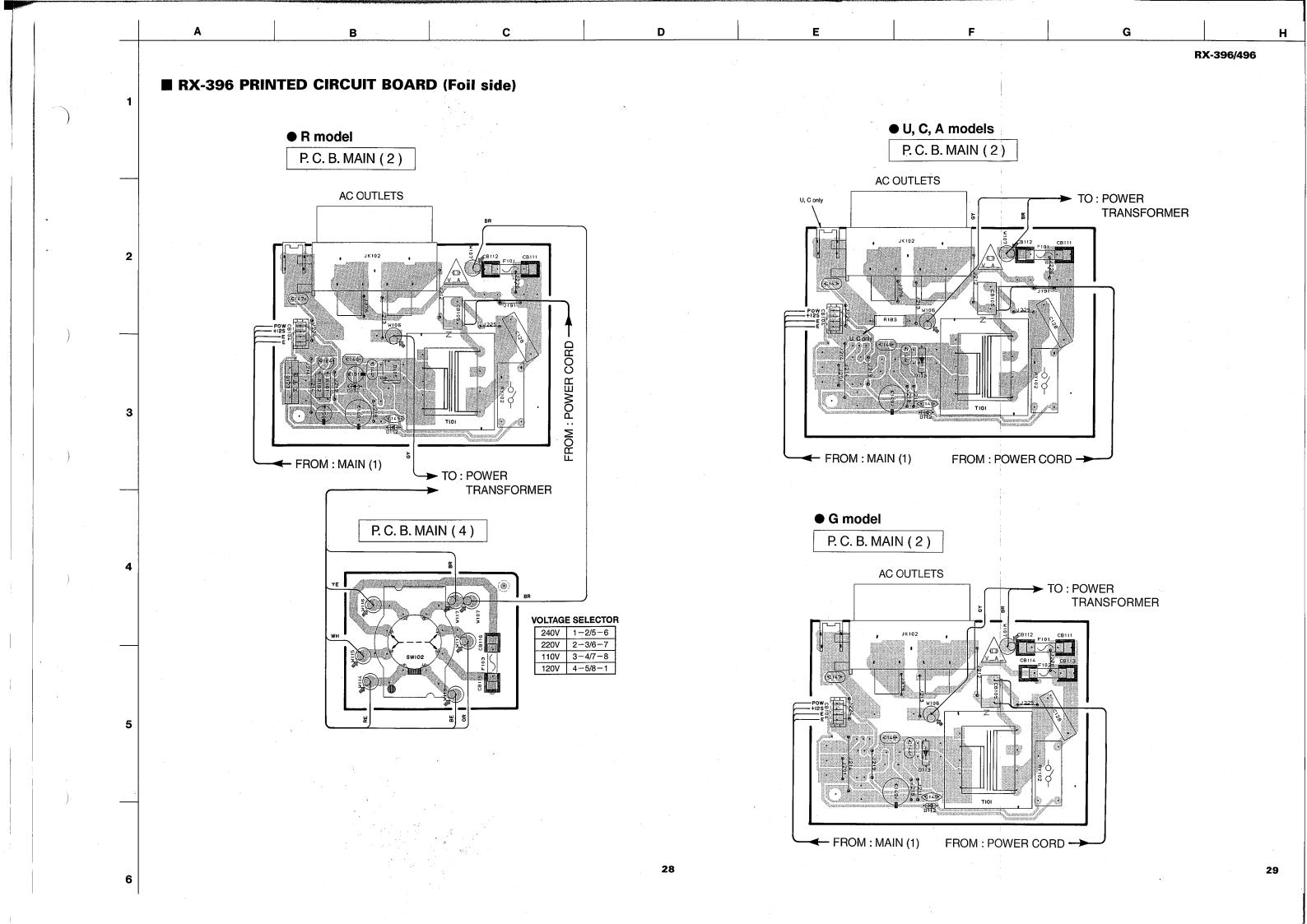
t With the POWER ON, discon-nect the A/C power cord. Re-connect the A/C power cord and the above waveforms will start.

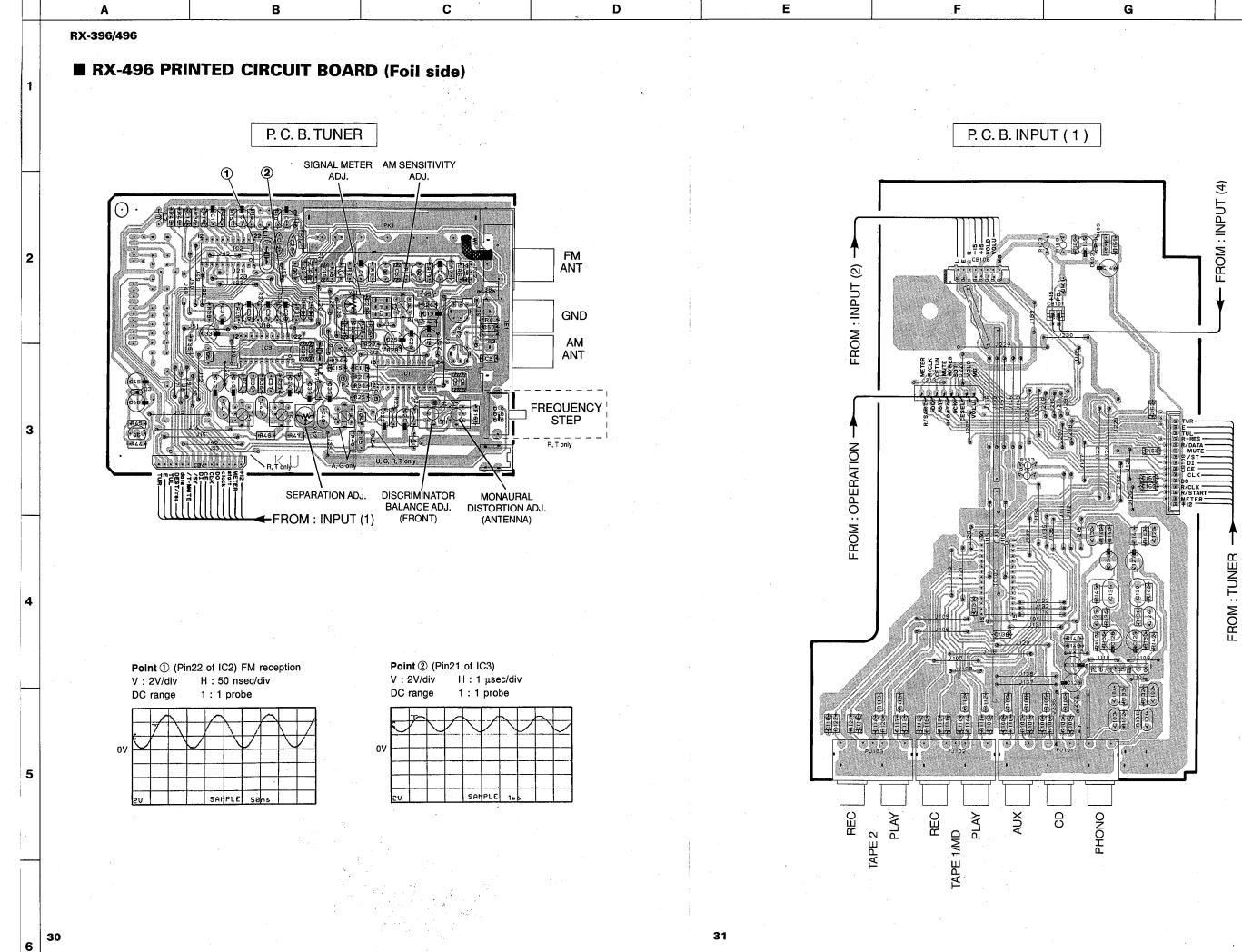
Α

Δ

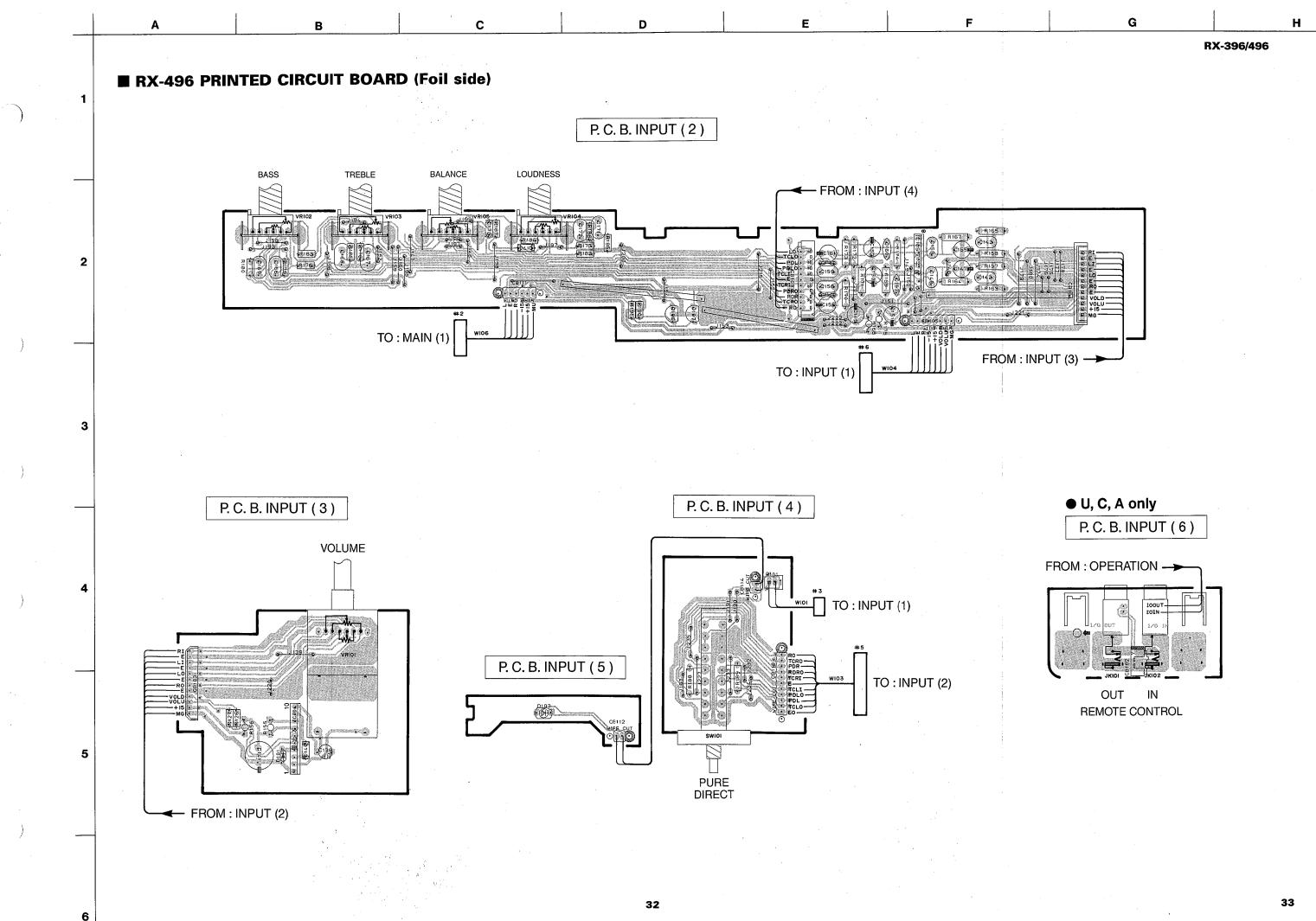


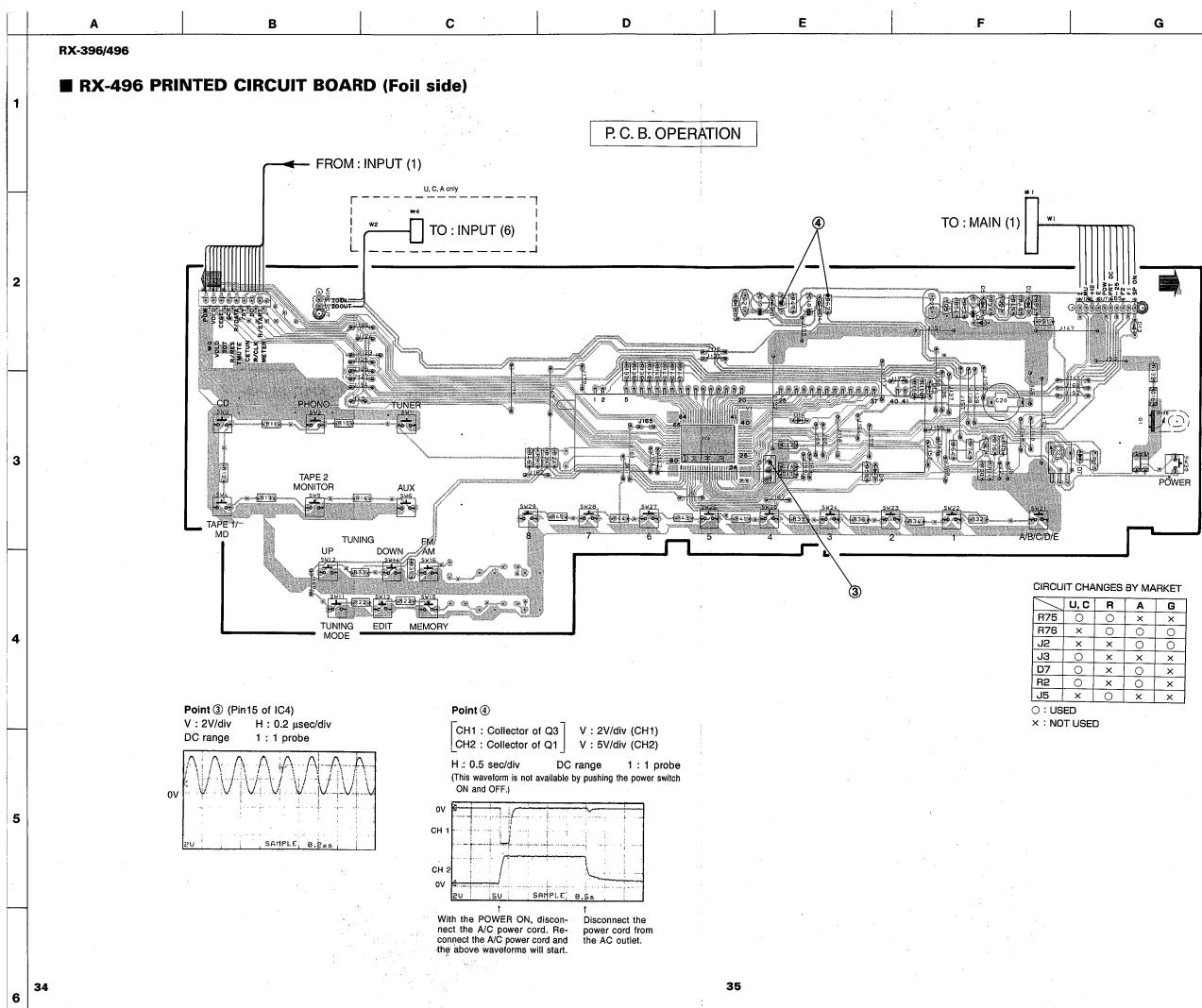
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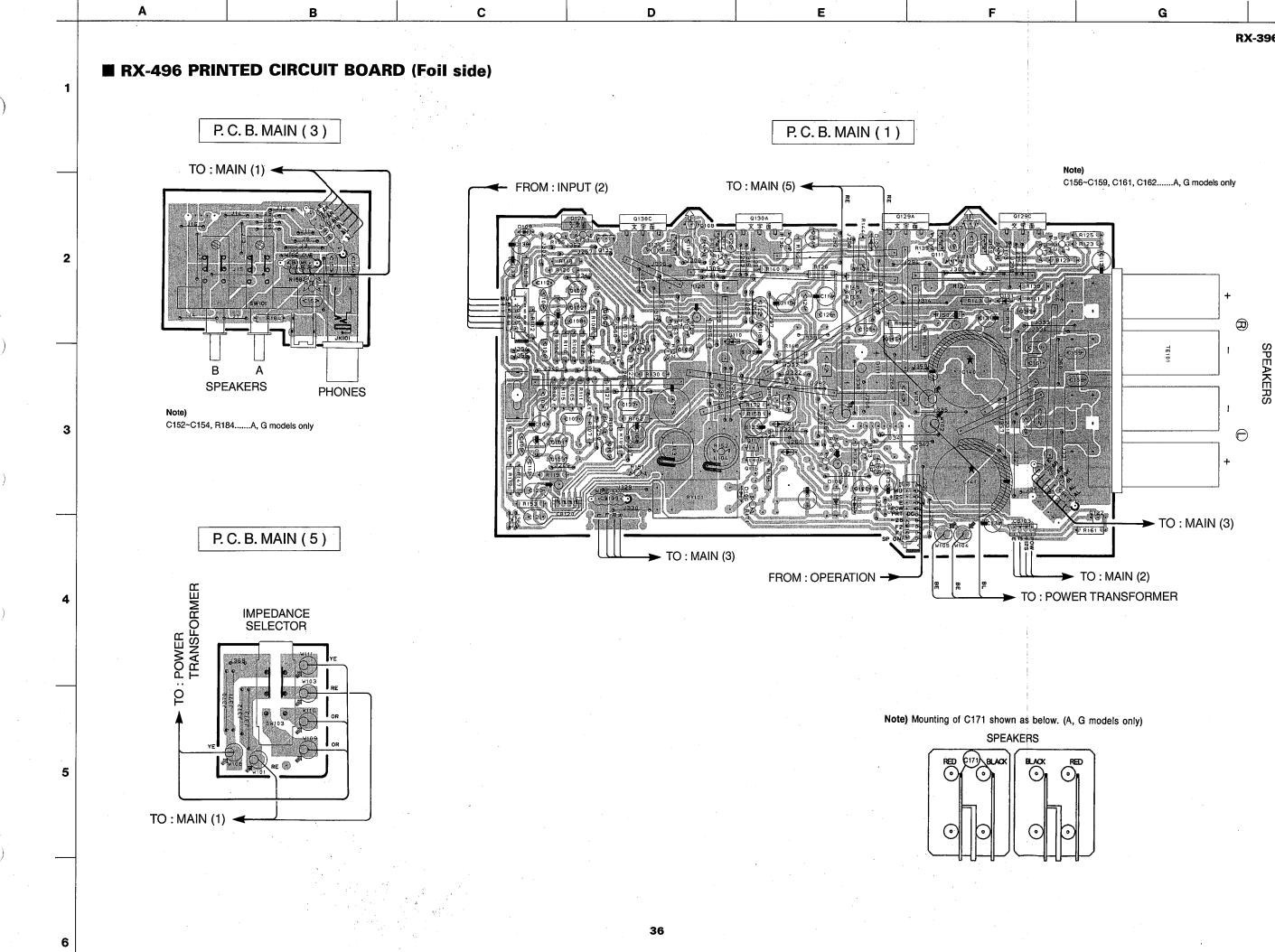


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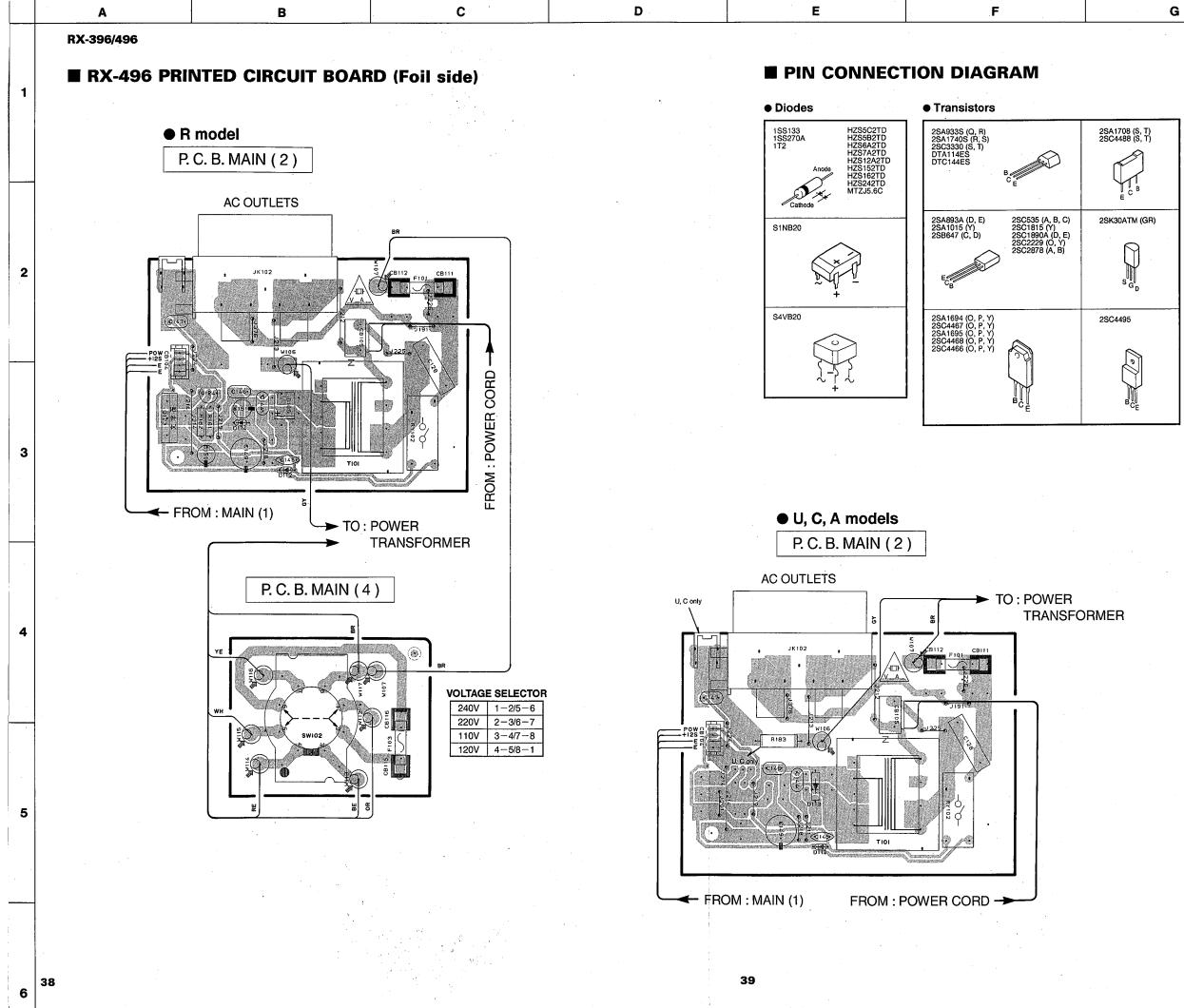


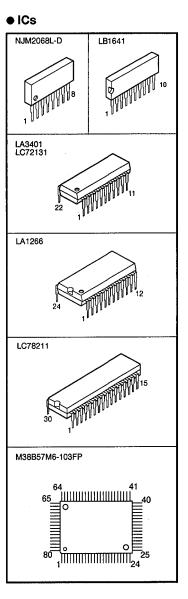
R	A	G
0	×	×
0	0	0
×	0	0
×	×	×
×	0	×
×	0	×
0	×	×
	0 0 × ×	0 × 0 0 × 0 × x × x × 0 × 0

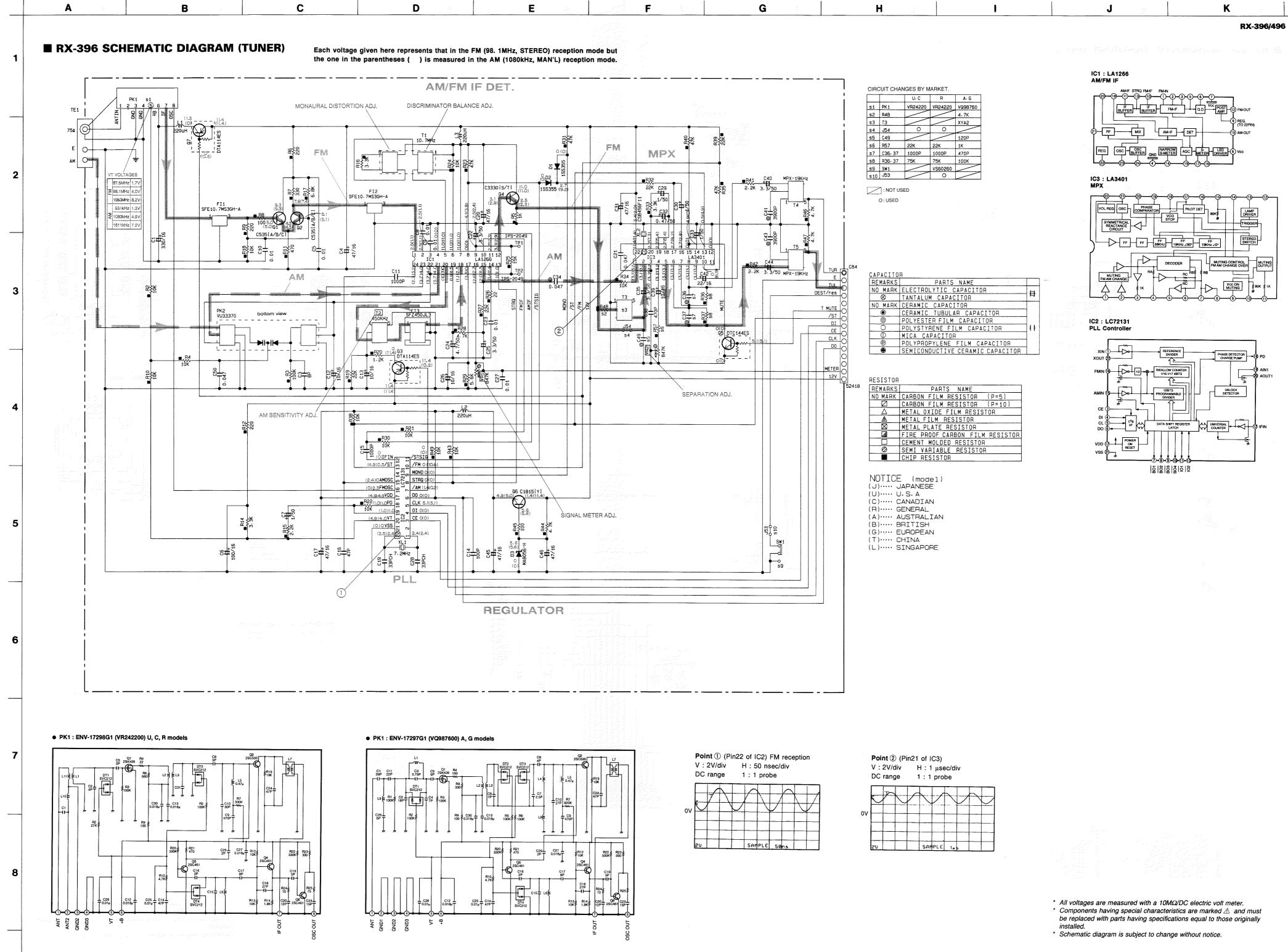


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CIRC	CIRCUIT CHANGES BY MARKET.						
		U, C	R	A, G			
si	PK1	VR24220	VR24220	VQ98760			
s2	R48			4.7K			
s3	T3			XYA2			
s4	J54	0	0	$\sim$			
s5	C49			120P			
s6	R57	22K	22K	1K			
s7	C36, 37	1000P	1000P	470P			
sB	R36+ 37	75K	75K	100K			
s9	SW1		VS60260				
s10	J53		0				

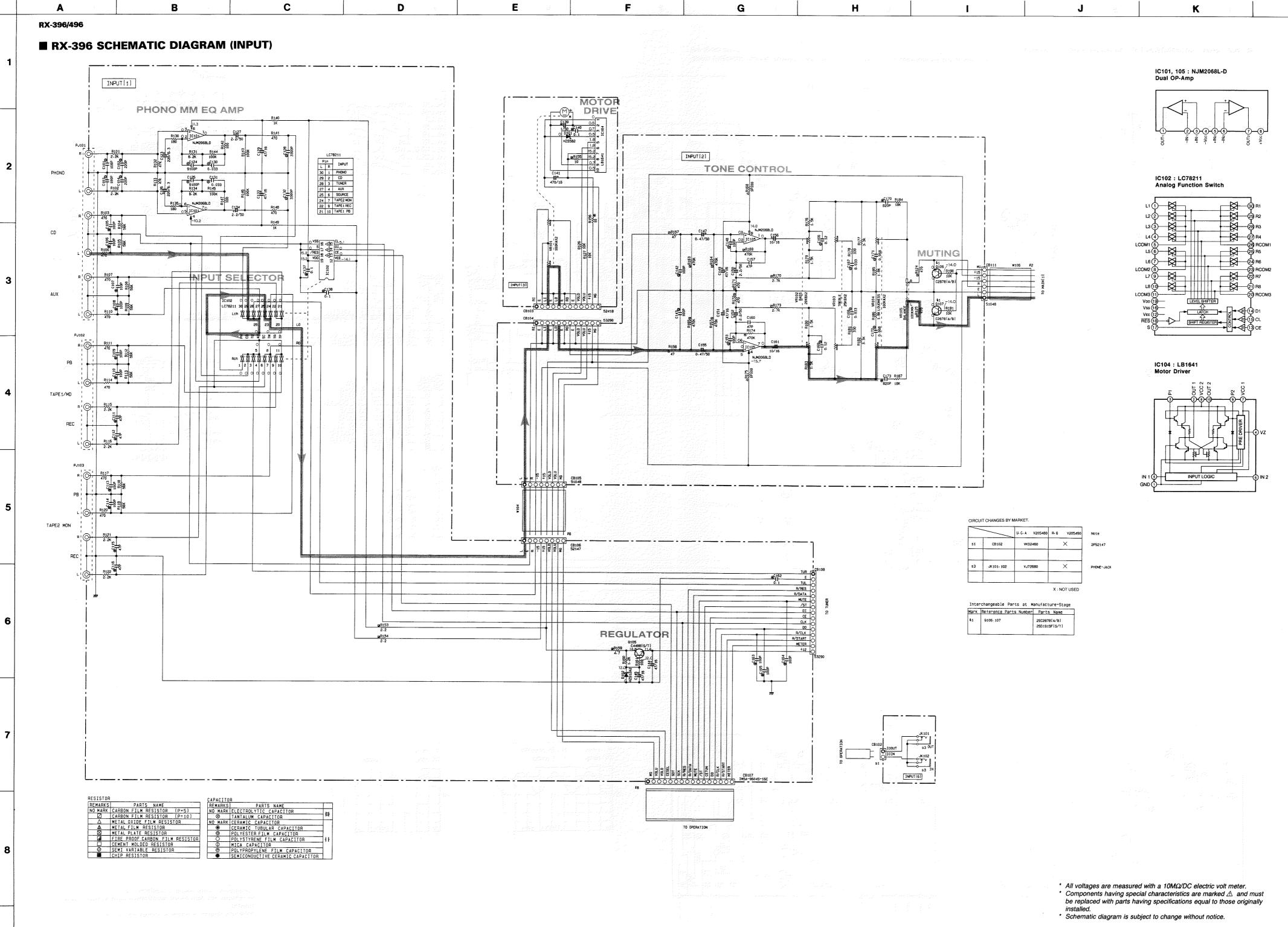
ACITO	R
MADKC	

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	₽
$\otimes$	TANTALUM CAPACITOR	PA
NO MARK	CERAMIC CAPACITOR	
۲	CERAMIC TUBULAR CAPACITOR	]
0	POLYESTER FILM CAPACITOR	]
0	POLYSTYRENE FILM CAPACITOR	11
Ð	MICA CAPACITOR	]
P	POLYPROPYLENE FILM CAPACITOR	]
۲	SEMICONDUCTIVE CERAMIC CAPACITOR	

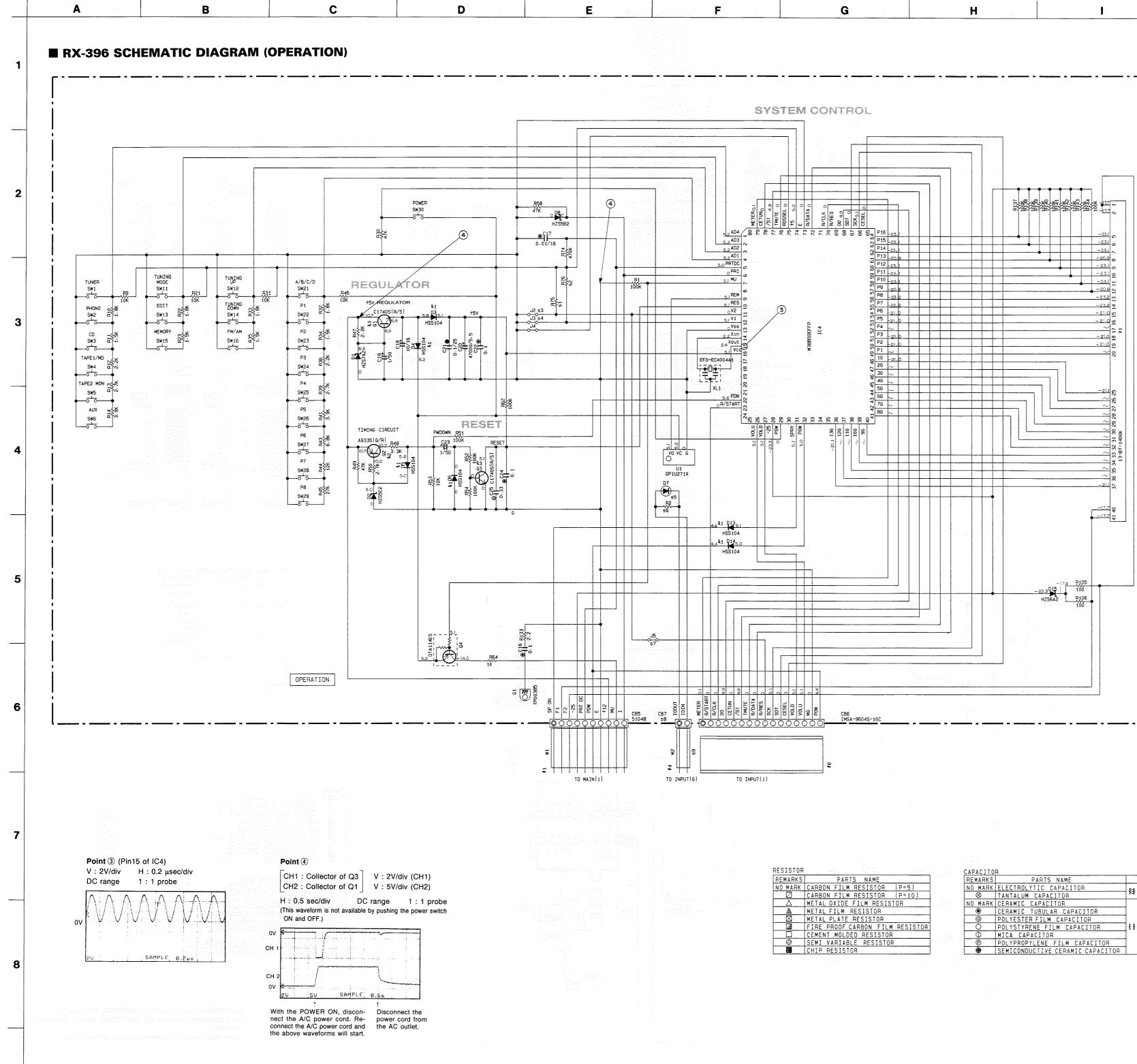
RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
	CARBON FILM RESISTOR (P=10)
$\triangle$	METAL OXIDE FILM RESISTOR
A	METAL FILM RESISTOR
$\square$	METAL PLATE RESISTOR
	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
Ø	SEMI VARIABLE RESISTOR
	CHIP RESISTOR

NOTICE (model) (J) JAPANESE (U) U. S. A (C) CANADIAN (R) GENERAL (A) AUSTRALIAN (B) BRITISH (G) EUROPEAN (T) CHINA	
(L)····· SINGAPORE	

ov		£				]	$\widehat{}$	
	20			SAP	PLE	50	ns	



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RX-396/496

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	4
$\otimes$	TANTALUM CAPACITOR	Ч
NO MARK	CERAMIC CAPACITOR	1
۲	CERAMIC TUBULAR CAPACITOR	
0	POLYESTER FILM CAPACITOR	]
0	POLYSTYRENE FILM CAPACITOR	]{
Φ	MICA CAPACITOR	
ø	POLYPROPYLENE FILM CAPACITOR	]
۲	SEMICONDUCTIVE CERAMIC CAPACITOR	1

Inter	changeable Parts at M	anufacture-Stage
Mark	Reference Parts Number	Parts Name
\$1	D3-6, 13, 14	HSS104
		1SS133
	1	1SS176
\$2	02	25A9335[Q/R]
		2SA1115[E/F]
		25A1309A[Q/R/S]
\$3	01.3	2SC1740S[R/S]
		2SC2603[E/F]
		2SC3311A[0/R/S]
	2	
	e e e e e e e e e e e e e e e e e e e	·
	12.	

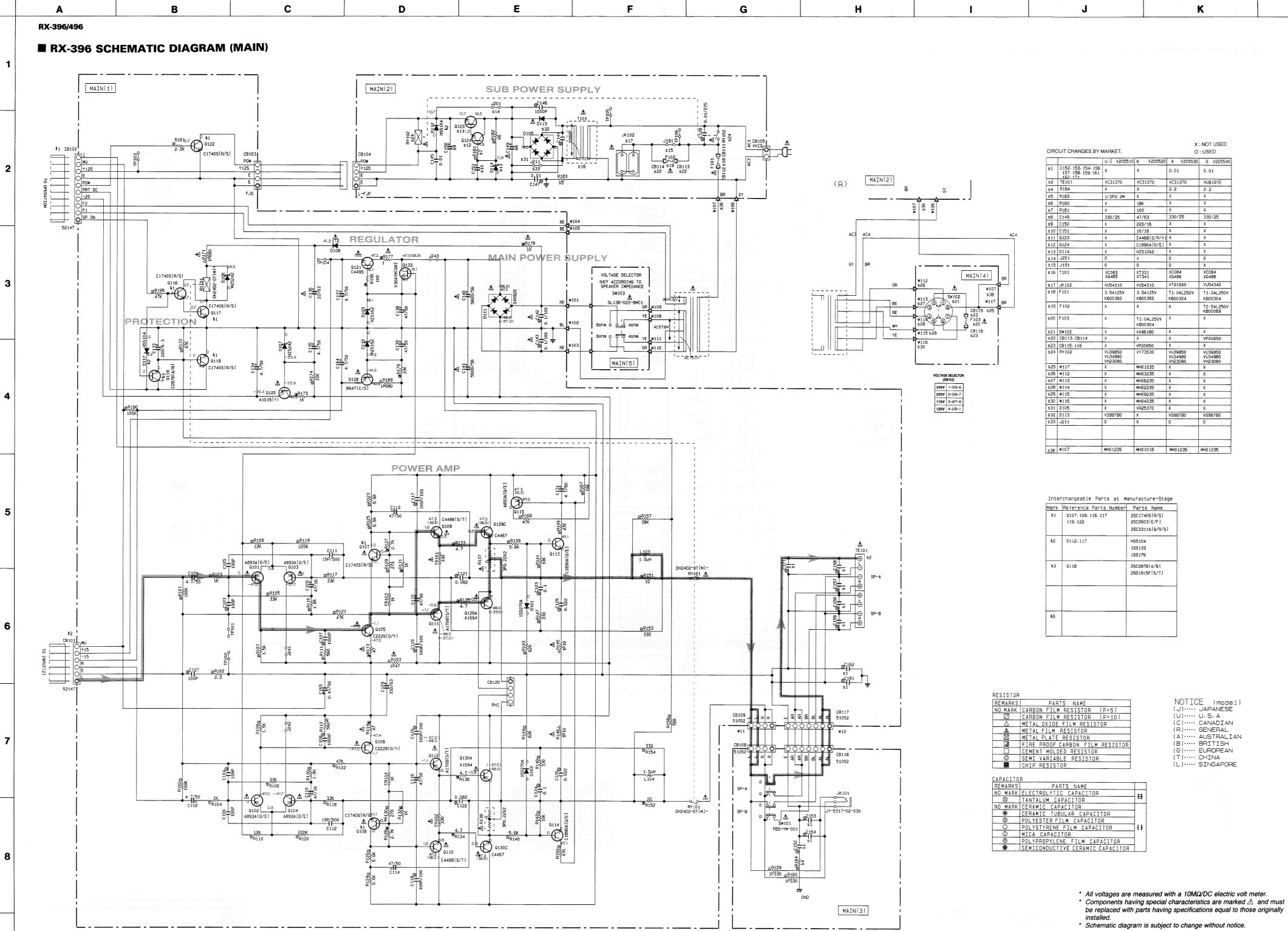
		U-C V205440	R V205450	A V220750	G V205460
si	R75	100K	100K	×	×
s2	R76	×	100K	100K	100K
s3	J2	×	×	0	0
54	JB	0	×	×	×
s5	D7	SIM-22ST VV62510	×	SIM~22ST VV62510	×
s6	R2	10K	×	10K	×
s7	J5	×	0	×	×
s8	CB7	5104B VI87B00	×	51048 VI87800	×
s9	W2	MF00235	×	MF00235	×

X : NOT USED O:USED

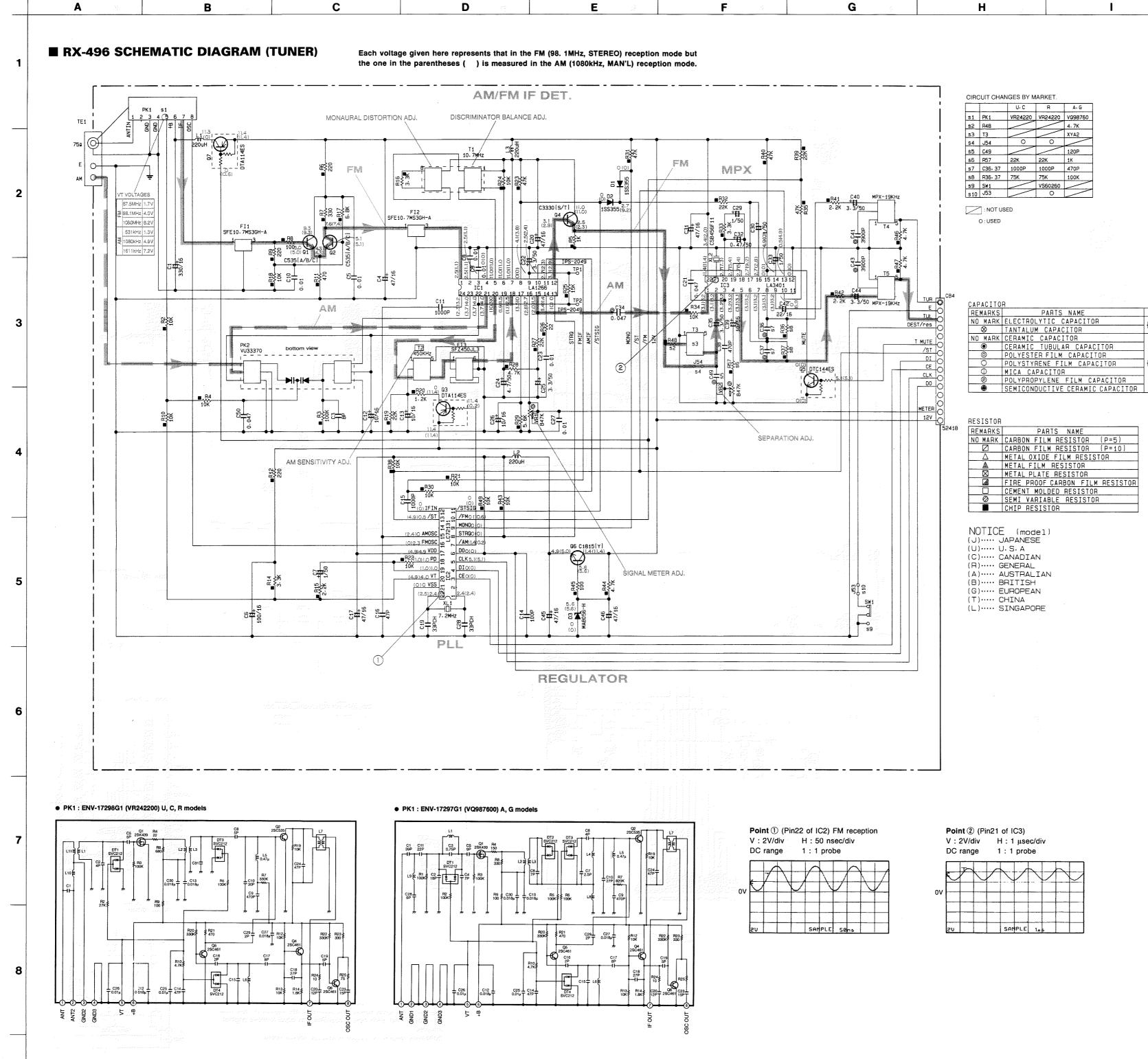
\* All voltages are measured with a  $10M\Omega/DC$  electric volt meter.

\* Components having special characteristics are marked A and must be replaced with parts having specifications equal to those originally installed.

\* Schematic diagram is subject to change without notice.



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RX-396/496

FM-IF

AM-IF DE

NARROW S-METER AGC

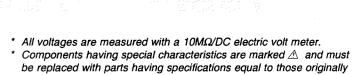
CIRCUIT CHANGES BY MARKET.						
		U.C	R	A, G		
51	PK1	VR24220	VR24220	VQ98760		
s2	R48			4.7K		
s3	T3			XYA2		
s4	J54	0	0			
s5	C49			120P		
s6	R57	22K	22K	1K		
s7	C36+ 37	1000P	1000P	470P		
s8	R36- 37	75K	75K	100K		
s9	SW1		VS60260			
s10	J53		0			

$\leq$	: NOT USED	
-		

	PARTS NAME	APACITO REMARKS
	ELECTROLYTIC CAPACITOR	O MARK
	TANTALUM CAPACITOR	8
	CERAMIC CAPACITOR	NO MARK
	CERAMIC TUBULAR CAPACITOR	۲
	POLYESTER FILM CAPACITOR	Ô
11	POLYSTYRENE FILM CAPACITOR	0
	MICA CAPACITOR	θ
	POLYPROPYLENE FILM CAPACITOR	ø
		-

RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
	CARBON FILM RESISTOR (P=10)
Δ	METAL OXIDE FILM RESISTOR
A	METAL FILM RESISTOR
$\boxtimes$	METAL PLATE RESISTOR
2	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
0	SEMI VARIABLE RESISTOR
	CHIP RESISTOR

U) ( C) ( R) ( A) ( B) ( G) (	CANADIAN GENERAL AUSTRALIAN BRITISH EUROPEAN	
⊤) (	CHINA	
∟) 9	SINGAPORE	

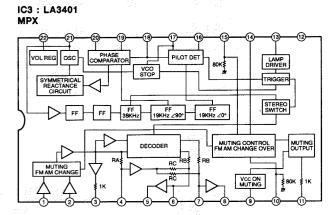


installed. \* Schematic diagram is subject to change without notice.

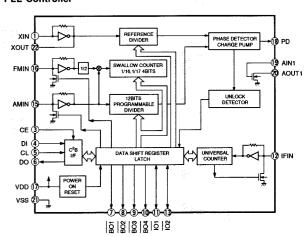
REG. OSC OSC BUFFER

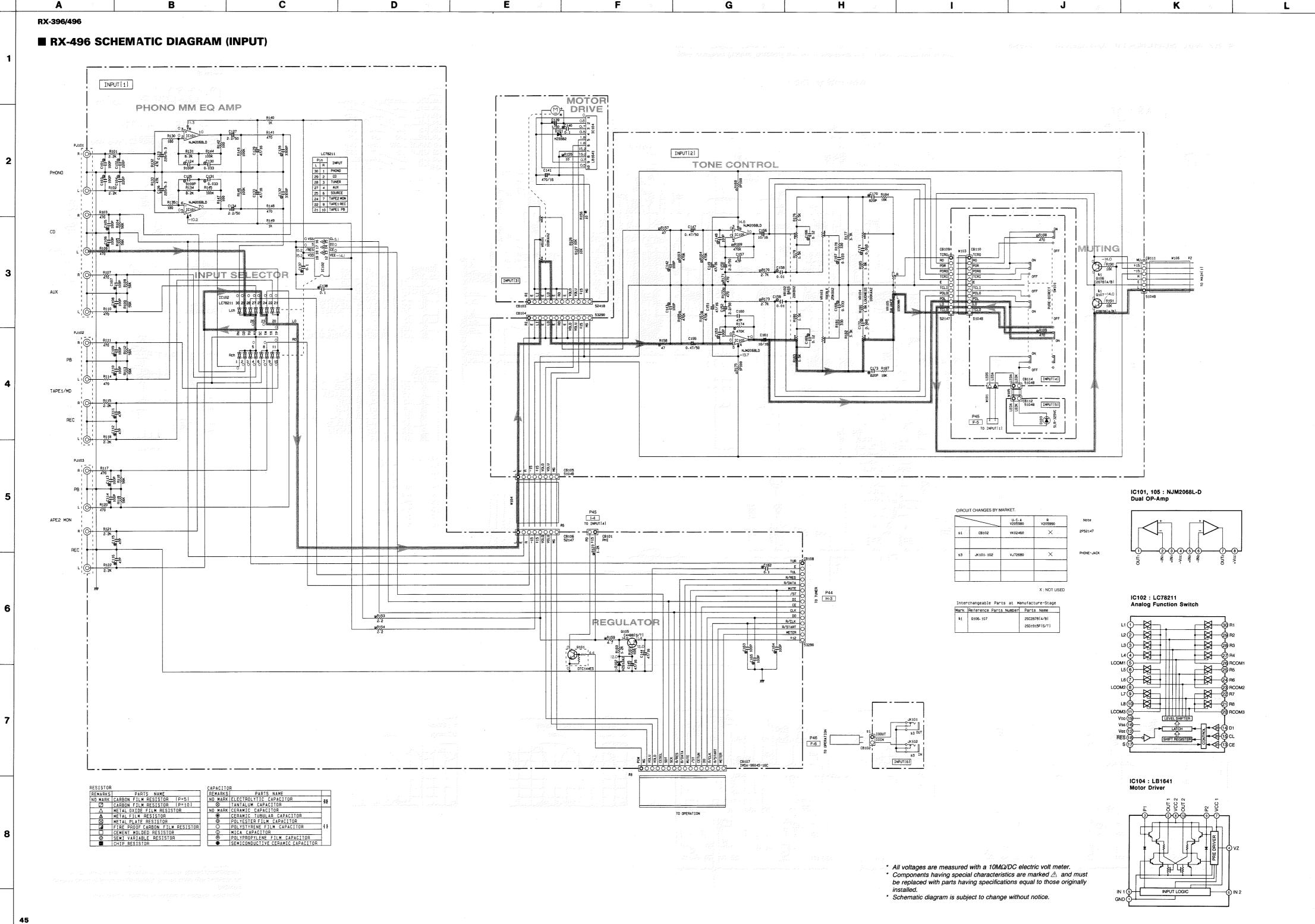
MIX

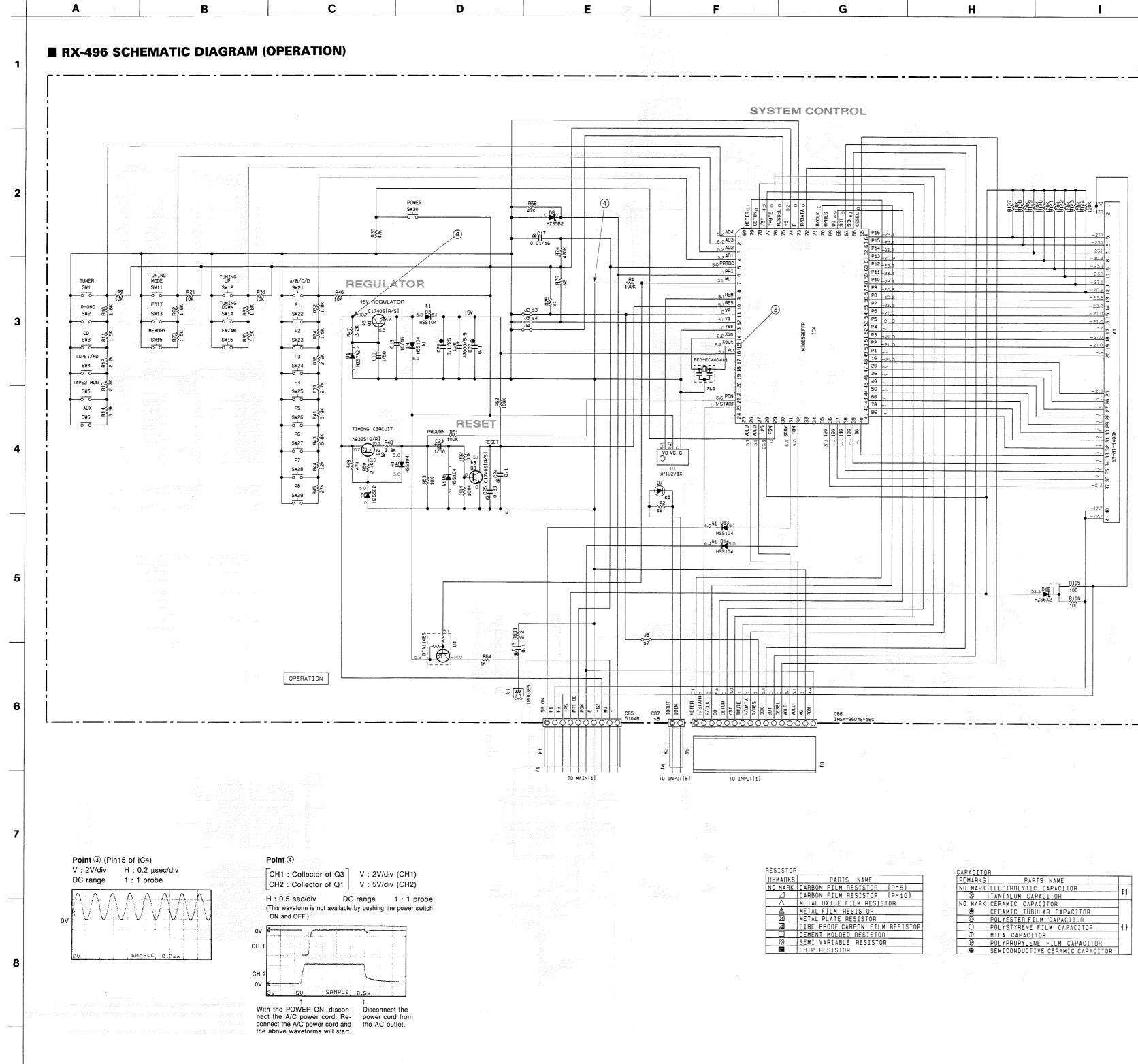
IC1:LA1266 AM/FM IF



# IC2 : LC72131 PLL Controller







G	H	I	J y	K	

RX-396/496

Interchangeable Parts at Manufacture-Stage Mark Reference Parts Number Parts Name &1 D3-6-13-14 HS5104 155133 1SS176 \$2 G2 25A9335[Q/R] 2SA1115[E/F] 2SA1309A[Q/R/S] 2SC17405[R/S] &3 Q1·3 2SC2603[E/F] 2SC3311A[Q/R/S]

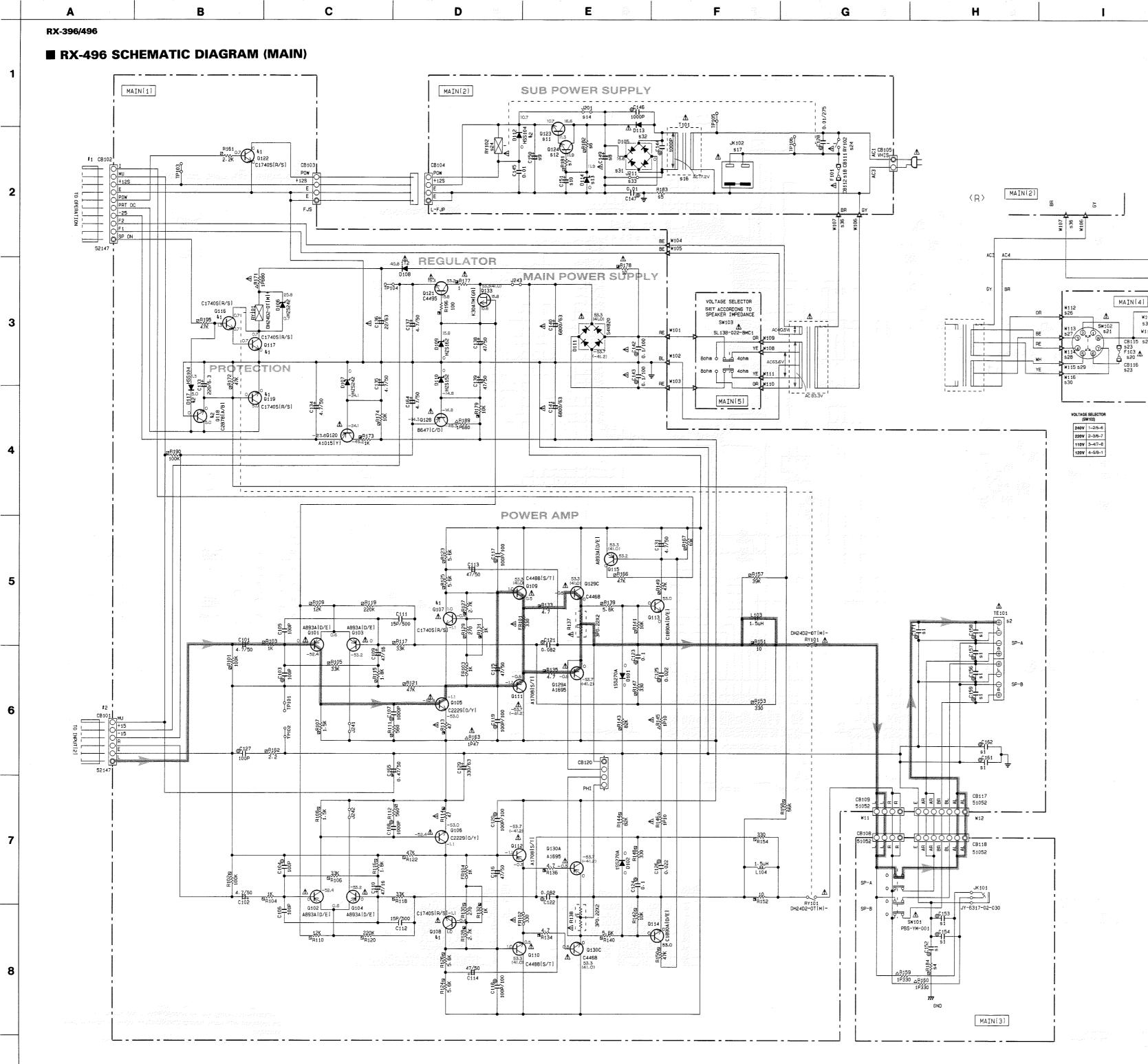
		U-C V205440	R V205450	A V220750	G V205460	
s1	R75	100K	100K	×	×	
s2	R76	×	100K	100K	100K	
s3	J2	×	×	0	0	
s4	J3	0	×	×	×	
s5	D7	SIM-22ST VV62510	×	SIM-22ST VV62510	×	
s6	R2	10K	×	10K	×	
<b>\$</b> 7	J5	×	0	×	×	
s8	CB7	51048 VI87800	×	51048 VI87800	×	
s9	W2 MF00235		X	MF00235	×	

X : NOT USED O : USED

\* All voltages are measured with a 10M $\Omega$ /DC electric volt meter.

\* Components having special characteristics are marked  $\triangle$  and must be replaced with parts having specifications equal to those originally

installed. \* Schematic diagram is subject to change without notice.



\$1 \$5 \$5 \$6 \$7 \$8 \$9 \$10 \$11 \$12	C152, 153, 154, 156 157, 158, 159, 151 152, 171 R184 R183 R182 R181 C149 C150 C151 G123 G124	X X 1/2P2.2M X X 330/25 X X X	X X X 18K 100 47/53 220/16	0.01 2.2 X X X 330/25 X
55 56 57 58 59 510 511	R183 R182 R181 C149 C150 C151 G123	1/2P2.2M X X 330/25 X	X 18K 100 47/63	X X X 330/25
s6 s7 s8 s9 s10 s11	R182 R181 C149 C150 C151 Q123	x x 330/25 x	18K 100 47/53	X X 330/25
57 58 59 510 511	R181 C149 C150 C151 Q123	x 330/25 X	100 47/53	X 330/25
58 59 510 511	C149 C150 C151 G123	330/25 X	47/53	330/25
59 510 511	C150 C151 Q123	X		
510 511	C151 Q123		220/16	v
511	Q123	x		^
			10/15	x
s12	0404	х	C4455[0/P/Y]	x
	9124	х	C1890A[D/E]	x
s13	D114	X	HZS12A2	Х
s14	J201	0	x	0
s16	T101	XC063 XQ485	XT331 XT341	XC084 X0486
517	JK102	VU54310	VU54310	VT91500
siB	F101	5-0A125V VS82300	5-0A125V VS82300	T1-6AL250V KB00166
	F103 SW102	x	T1-6AL250V KB00166 VA96180	x
	58702	^	1430100	
s23	CB115-116	x	VP20650	X
s24	RY102	VU39850 VU34980 VH23080	VY73530	VU39850 VU34980 VH23080
s25	W117	х	MH01235	x
s26	W112	х	MH03235	X
s27	W113	x	MH06235	X
	W114	x	MH02235	Х
	W115	x	MH09235	Х
s30	W116	х	MH04235	Х
s31	D105	x	VR25370	X
s32	D113	VS99780	Χ.	VS99780
s33	J211	0	X	0
s36	W107	MH01235	MH01018	MH01235

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Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
&1	Q107. 108. 116. 117 119. 122	2SC1740S[R/S] 2SC2603[E/F] 2SC3311A[Q/R/S]
\$2	D112- 117	H5S104 1SS133 1SS176
\$3	0118	2SC2878[A/B] 2SD1915F[S/T]
<b>&amp;</b> 5		

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
Ø	CARBON FILM RESISTOR (P=10)
Δ	METAL OXIDE FILM RESISTOR
A	METAL FILM RESISTOR
$\boxtimes$	METAL PLATE RESISTOR
	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
$\otimes$	SEMI VARIABLE RESISTOR
	CHIP RESISTOR

REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	₽
$\otimes$	TANTALUM CAPACITOR	ы
NO MARK	CERAMIC CAPACITOR	
۲	CERAMIC TUBULAR CAPACITOR	
0	POLYESTER FILM CAPACITOR	]
0	POLYSTYRENE FILM CAPACITOR	11
Φ	MICA CAPACITOR	
P	POLYPROPYLENE FILM CAPACITOR	]
۲	SEMICONDUCTIVE CERAMIC CAPACITOR	1

NOTICE (model) (J) JAPANESE (U) U.S.A (C) CANADIAN (R) GENERAL (A) AUSTRALIAN (B) BRITISH (G) EUROPEAN (T) CHINA (L) SINGAPORE
(L)····· SINGAPORE

\* All voltages are measured with a 10M $\Omega$ /DC electric volt meter. \* Components having special characteristics are marked  $\triangle$  and must

be replaced with parts having specifications equal to those originally installed.

\* Schematic diagram is subject to change without notice.

## PARTS LIST

#### **ELECTRICAL PARTS**

#### **WARNING**

Components having special characteristics are marked  $\triangle$  and must be replaced with parts having specifications equal to those originally installed.

• Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS List. For the part Nos. of the carbon resistors, refer to the last page.

#### ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS :

,				
			CHIP ALUMI. ELECTROLYTIC CAP	L.!
C	D.CE	:	CERAMIC CAP	LE
_ C	C.CE.ARRAY	:	CERAMIC CAP ARRAY	LE
C	D.CE.CHP	:	CHIP CERAMIC CAP	M
C	D.CE.ML	:	CERAMIC CAP ARRAY CHIP CERAMIC CAP MULTILAYER CERAMIC CAP	PH
Ċ	CEMCHP	•	CHIP MULTILAYER CERAMIC CAP	Ph
č				PH
~		:	RECOGNIZED CERAMIC CAP CERAMIC TUBULAR CAP	PI
		:		
C	J.CE.SIMI	:	SEMI CONDUCTIVE CERAMIC CAP	PL
C	D.EL	:	ELECTROLYTIC CAP MICA CAP MULTILAYER FILM CAP	R.
	C.MICA	:	MICA CAP	R.
C	D.ML.FLM	:	MULTILAYER FILM CAP	R.
C	D.MP	:	METALLIZED PAPER CAP	R.
C	C.MYLAR	:	METALLIZED PAPER CAP MYLAR FILM CAP MULTILAYER MYLAR FILM CAP	R.
C	MYLAR.ML	•	MULTILAYER MYLAR FILM CAP	R.
Ċ		÷	PAPER CAPACITOR	R.
~	D.PLS	:		R.
	D.POL	:	POLYESTER FILM CAP	R.
		•	POLYESTER FILM CAP POLYETHYLENE FILM CAP	n. D(
C	C.POLY	:		R
C	C.PP	:	POLYPROPYLENE FILM CAP	RS
C	C.TNTL	:	TANTALUM CAP	R.
C	C.TNTL.CHP	:	CHIP TANTALUM CAP TRIMMER CAP CONNECTOR	R.
C	C.TRIM	:	TRIMMER CAP	SC
Ċ	CN	:	CONNECTOR	SC
C	N.BS.PIN	:	MULTILAYEH MYLAH FILM CAP PAPER CAPACITOR POLYSTYRENE FILM CAP POLYESTER FILM CAP POLYETHYLENE FILM CAP POLYPROPYLENE FILM CAP TANTALUM CAP CHIP TANTALUM CAP TRIMMER CAP CONNECTOR CONNECTOR, BASE PIN CONNECTOR, CANNON CONNECTOR, DIN CONNECTOR, FLAT CABLE	SC
Ċ			CONNECTOR, BASE PIN CONNECTOR, CANNON	SC
Č		:	CONNECTOR, DIN	S
	CN.FLAT	:	CONNECTOR ELAT CARLE	SL
C C		•	CONNECTOR, FLAT CABLE CONNECTOR, BASE POST	50
C	CN.POST	:	CONNECTOR, BASE POST	SL
C	JOIL.MX.AM	:	COIL, AM MIX	SV
C	COIL.AT.FM	:	COIL, FM ANTENNA	SV
C	COIL.DT.FM	:	COIL, FM DETECT	SV
C	COIL.MX.FM	:	COIL, FM ANTENNA COIL, FM DETECT COIL, FM MIX OUTPUT COIL DIODE ARRAY DIODE BRIDGE CHIP DIODE VARACTOR DIODE CHIP ZENER DIODE ZENER DIODE CERAMIC DISCRIMINATOR FERRITE BEADS FERRITE CORE CHIP FET	SV
- C	COIL.OUTPT	:	OUTPUT COIL	SV
Ľ	DIOD.ARRAY	:	DIODE ARRAY	SV
			DIODE BRIDGE	SV
Г	DIODE CHP		CHIP DIODE	SV
Г			CHIP DIODE VARACTOR DIODE	SV
- r		:	CHIP ZENER DIODE	TE
				TE
		÷	ZENER DIODE CERAMIC DISCRIMINATOR	
			FERRITE BEADS	TF
F	ER.CORE	:	FERRITE CORE CHIP FET	TF
F	ET.CHP	:	CHIP FET	TF
, F	L.DSPLY	:	FLUORESCENT DISPLAY	TF
F	LTR.CE	:	CERAMIC FILTER	TF
F	LTR.COMB	:	COMB FILTER MODULE	TF
	LTR.LC.RF	÷	LC FILTER ,EMI	TU
	SND.MTL	:	GROUND PLATE	TU
	SND.TERM	:	GROUND TERMINAL	TL
		•		VF
	OLDER.FUS	:	FUSE HOLDER	
	C.PRTCT	:	IC PROTECTOR	VF
	UMPER.CN	:	JUMPER CONNECTOR	VF
	UMPER.TST	:	•	VF
L	DTCT	:	LIGHT DETECTING MODULE	VF

PHOT.CPL PHOT.INTR PHOT.RFLCT PIN.TEST PLST.RIVET R.ARRAY R.CAR R.CAR.CHP R.CAR.FP R.FUS R.MTL.CHP R.MTL.CHP R.MTL.FLM R.MTL.OXD R.MTL.PLAT RSNR.CE RSNR.CRYS R.TW.CEM R.WW SCR.BND.HD SCR.BND.HD SCR.BND.HD SCR.BND.HD SCR.BND.HD SCR.CUP SCR.TERM SCR.TR SUPRT.PCB SURG.PRTCT SW.LEAF SW.LEVER SW.LEVER SW.LEVER SW.MICRO SW.PUSH SW.RT.ENC SW.RT.MTR SW.RT SW.SLIDE TERM.SP TERM.WRAP THRMST.CHP TR.DGT TR.DGT TR.DGT TR.DGT TRANS TRANS.PULS TRANS.PWR TUNER.FM TUNER.FM TUNER.PK		PHOTO INTERRUPTER PHOTO REFLECTOR PIN, TEST POINT PLASTIC RIVET RESISTOR ARRAY CARBON RESISTOR CHIP RESISTOR FLAME PROOF CARBON RESISTOR FLAME PROOF CARBON RESISTOR FUSABLE RESISTOR CHIP METAL FILM RESISTOR METAL FILM RESISTOR METAL OXIDE FILM RESISTOR METAL OXIDE FILM RESISTOR METAL DATE RESONATOR CRYSTAL RESONATOR CRYSTAL RESONATOR TWIN CEMENT FIXED RESISTOR WIRE WOUND RESISTOR BIND HEAD B-TITE SCREW BW HEAD TAPPING SCREW CUP TITE SCREW SCREW TERMINAL SCREW, TRANSISTOR SUPPORT, P.C.B. SURGE PROTECTOR TACT SWITCH LEVER SWITCH MICRO SWITCH PUSH SWITCH ROTARY ENCODER ROTARY SWITCH WITH MOTOR ROTARY SWITCH SLIDE SWITCH SLIDE SWITCH CHIP THERMISTOR CHIP TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER ASS'Y TUNER PACK, FM FRONT-END TUNER PACK
TRANS.PWR TUNER.AM TUNER.FM TUNER.PK VR VR VR.MTR	:::::::::::::::::::::::::::::::::::::::	POWER TRANSFORMER ASS'Y TUNER PACK, AM TUNER PACK, FM FRONT-END TUNER PACK ROTARY POTENTIOMETER POTENTIOMETER WITH MOTOR
VR.SW VR.SLIDE VR.TRIM	::	POTENTIOMETER WITH ROTARY SW SLIDE POTENTIOMETER TRIMMER POTENTIOMETER

Note) Those parts marked with "#" are not included in the P.C.B. ass'y.

**RX-396 P.C.B. OPERATION** 

	Schm Ref.	PART NO.	Desc	ription
*		V2054400	P.C.B.	OPERATION (UC)
*		V2054500	P.C.B.	OPERATION (R)
*		V2054600	P.C.B.	OPERATION (G)
*		V2207500	P.C.B.	OPERATION (A)
	CB5	Vi878800	CN.BS.PIN	10P
	CB6	VU271600	CN	16P
	CB7	Vi878000	CN. BS. PIN	2P(UCA)
	C16	VH053100	C. CE. TUBLR	0. 1uF 50V
	C17	VF467300	C. CE. TUBLR	0.01uF 16V
	C18	VJ836900	C.EL	10uF 16V
	C19	VJ839100	C.EL	1uF 50V
	C20		C. EL	47000uF 5.5V
	C21	1	C. CE. SMI	0. 1uF 25V
	C22		C. CE. TUBLR	0. luF 50V
	C23		C.EL	luF 50V
	C24		C.CE.TUBLR	0. 1uF 50V
	C25		C. MYLAR	0.33uF 50V
	C25		C. CE. TUBLR	0.1uF 50V
	D1		DIODE. ZENR	HZS7A2TD 7.0V
	D2		DIODE. ZENR	HZS5C2TD 5.0V
	D3	VD631600	DIODE	1SS133, 176, HSS104
	D4	VD631600	DIODE	1SS133, 176, HSS104
	D5	VD631600	DIODE	1SS133, 176, HSS104
	D6		DIODE	1SS133, 176, HSS104
	D7		LED(re)	SIM-22ST (UCA)
	D8		DIODE. ZENR	HZS5B2TD 5.0V
	D13		DIODE	1SS133, 176, HSS104
	D14	VD631600	DIODE	1SS133, 176, HSS104
	D15	VM974300	DIODE.ZENR	HZS6A2TD 6.0V
	G1	VR463400	TERM. GND	D3.5 TP00385
	IC4	XU108A00	IC	M38B57M6-103FP CPU
	Q1	iC174020	TR	2SC1740S R, S
	Q2	iA093320	TR	2SA933S Q, R
	Q3	iC174020	TR	2SC1740S R, S
	Q4	VD678500	TR.DGT	DTA114ES
	SW1	V2014900	SW. TACT	EVQ21304M
	SW2	V2014900	SW. TACT	EVQ21304M
	SW3	V2014900	SW. TACT	EVQ21304M
	SW4	V2014900	SW. TACT	EVQ21304M
	SW5	V2014900	SW. TACT	EVQ21304M
	SW6	V2014900	SW. TACT	EVQ21304M
	SW11	V2014900	SW. TACT	EVQ21304M
	SW12	V2014900	SW. TACT	EVQ21304M
	SW13	V2014900	SW. TACT	EVQ21304M
	SW14	V2014900	SW. TACT	EVQ21304M
	SW15	V2014900	SW. TACT	EVQ21304M
	SW16	V2014900	SW. TACT	EVQ21304M
	SW21	V2014900	SW. TACT	EVQ21304M
.	SW22	V2014900	SW. TACT	EVQ21304M
	SW23	V2014900	SW. TACT	EVQ21304M
	SW24	V2014900	SW. TACT	EVQ21304M
	SW25	V2014900	SW. TACT	EVQ21304M
	SW26	V2014900	SW. TACT	EVQ21304M

Schm Ref. PART NO. Description V2014900 SW. TACT SW27 EVQ21304M SW28 V2014900 SW. TACT EVQ21304M SW29 V2014900 SW. TACT EVQ21304M SW30 V2014900 SW. TACT EVQ21304M U1 VU591000 GP1U271X L. DTCT V1 VT668600 FL.DSPLY 13-BT-140GK XL1 VD827600 RSNR.CE 4MHz VY760000 SPACER (UCA) VR380100 SPACER FL-T6 VR519500 SHEET

\* New Parts

\* New Parts

RX-396 P.C.B. MAIN

Schm		·	·		]		Schm				·······
Ref.	PART NO.		ription				Ref.	PART NO.		cription	
*	V2055100		MAIN(UC)			$\triangle$	C136	Vi846000		22uF	63V
*	V2055200		MAIN(R)				C137	UM416470		4.7uF	50V
*	V2055300		MAIN(A)				C138	UJ667470		47uF	50V
*	V2055400		MAIN(G)				C139	UJ667470		47uF	50V
CB10			6P			$\triangle$	C140	VR023900		5600uF	56V
	2   VF728200		10P			$\triangle$	C141	VR023900		5600uF	56V
	3 VS839400		4P			$\wedge$	C142	VR325400		0. 1uF	100V
	1 VS839500		4P			$\triangle$	C143	VR325400		0. luF	100V
	5   VG879900		2P				C144	UA653100	C. MYLAR	1000pF	50V
	3 VR428900		4P				C145	FG214100		0.01uF	50V
	) VR428900		4P				C146	UA653100		1000pF	50V
	l VP206500		EYF-52BC				C147	UA654100	C. MYLAR	0.01uF	50V
	2 VP206500		EYF-52BC			$\triangle$	C149	Ui377470	C.EL	47uF	63V(R)
	3   VP206500		EYF-52BC			$\triangle$	C149	VK457600	C.EL	330uF	25V(UCAG)
	l   VP206500		EYF-52BC				C150	UJ648220	C.EL	220uF	25V(R)
	5 VP206500		EYF-52BC				C151	VJ836900	C.EL	10uF	16V(R)
	VP206500		EYF-52BC	(R)			C152	UA654100		0.01uF	50V(AG)
	7 VQ584900		7P				C153	UA654100		0.01uF	50V(AG)
CB118	VQ584900	CN.BS.PIN	7P				C154	UA654100		0.01uF	50V(AG)
	VD004700		4P				C156	UA654100		0.01uF	50V(AG)
C101	UM416470		4.7uF	50V			C157	UA654100	C. MYLAR	0.01uF	50V(AG)
C102	UM416470		4.7uF	50V			C158	UA654100		0.01uF	50V(AG)
C103	UA652100		100pF	50V			C159	UA654100		0.01uF	50V(AG)
C104	UA652100		100pF	50V			C161	UA654100	C. MYLAR	0.01uF	50V(AG)
C105	FG212100		100pF	50V			C162	UA654100	C. MYLAR	0.01uF	50V(AG)
C106	FG212100		100pF	50V			C164	UM416470	C.EL	4.7uF	50V
C107	UA653100		1000pF	50V			C165	UK665470	C.EL	0.47uF	50V
C108	UA653100		1000pF	.50V			C171	UA654100	C. MYLAR	0.01uF	50V(AG)
C109	VJ837200		47uF	16V			C191	VH053100		0.1uF	50V
C110	VJ837200		47uF	16V			D101	VN008700		1SS270A	
C111 C112	VR516400 VR516400		15p	500V			D102	VN008700		1SS270A	
C112	UJ667470		15p	500V			D105		DIODE.BRG	S1NB20 1	
C113	UJ667470	1	47uF	50V			D106		DIODE.ZENR	HZS242TD	24V
C114 C115	VG291200		47uF	50V			D107		DIODE.ZENR	HZS242TD	24V
C115	VG291200 VG291200		47uF 47uF	50V			D108	VS997800		1T2	1.011
C110	V8291200 VR325000		47ur 100pF	50V			D109			HZS162TD	
C118	VR325000		100pF	100V 100V			D110		DIODE.ZENR		15V
C110 C119	VR325000		100pF	100V 100V		Δ	D111 D112		DIODE. BRG		2.6A 200V
C110	VR325000		100pF	100V			D112 D113	VD631600 VS997800		1SS133, 17	0, HSS104
C120	UA654820	•	0.082uF	50V					DIODE.ZENR	1T2(UCAG)	19V/D)
C122	UA654820		0.082uF	50V			D114 D117	VM975500 VD631600		HZS12A2TD	
C123	UA655100		0.1uF	50V			F101	KB003040		1SS133, 17	
C124	UA655100		0. 1uF	50V			F101		FUSE	TL1.0A S(	
C124 C125	UA654220		0.022uF	50V			F101 F102		FUSE	T3.15A 12 T2.5A 25	
C125	UA654220		0.022uF	50V			F102 F103		FUSE	TL1.0A S(	
C120	UA652100		100pF	50V			FR103		R. FUS	$330\Omega$	n) 1/4W
C128		C. CE. SAFTY	0.01uF	275V					R. FUS	330 Ω	1/4₩ 1/4₩
C129	VK182500		330uF	63V				VK189000		330Ω 1KΩ	1/4W
C131	UM416470		4.7uF	50V					R. FUS	$1K\Omega$	1/4W
C133	VC815000		220uF	6.3V					TERM. GND		00385
C134	UM416470		4.7uF	50V					JACK. PHONE	JY-6317-0	
C135	UM416470		4.7uF	50V			-		OUTLET. AC	2P(A)	
* Now Pr						- L	••-				

\*New Parts

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\* New Parts

RX-396 P.C.B. MAIN

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$A_{1}$ Kirlo2         Visba4000         OUTLET, AC $2^{P}(G)$ $\Delta$ R178         HV454100         R. CAR. PF         IOG $1/4W$ L103         VF575000         OUIL         1. Suff         R178         HV457100         R. CAR. PF         IOG $1/4W$ $\Delta$ Q102         VF583000         TR         2SA993A D, E         R106         HV45100         R. CAR. PF         IOG $1/4W$ $\Delta$ Q102         VF583000         TR         2SA993A D, E         A         R106         HV453100         R. CAR. PF         IOG $1/4W$ $\Delta$ Q100         VF583000         TR         2SA993A D, E         A         R110         VK93300         REIAY         DE CLAIAF-12V (UAC30 $\Delta$ Q106         VF235000         TR         2SC1229 O, Y         A         S7101         VK961800         VK1AF         SES         ST4274-F(R) $\Delta$ Q106         VF23700         TR         2SC17405 R, S $\Delta$ T101         X081400         TRMS. PW         GL         SL38-022-A00C1 $\Delta$ Q100         VF27000         TR         2SC17405 R, S $\Delta$	^				· · · · · · · · · · · · · · · · · · ·	Â				
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Δ         0.03         VF883000         TR         25A893A         D. E         A         RY102         VI398500         RELAY         DC         LL1A+-12V (UC4G)           Δ         Q104         VF883000         TR         25A893A         D. E         A         RF102         VV353000         RELAY         DC         BL1A+-12V (UC4G)           Δ         Q106         VF8235000         TR         2522229         O, Y         A         SV102         VV9518000         VOLT.SELCT         ESE-37247-F(R)           Δ         Q106         VF72700         TR         252C1405 R, S         A         T101         X0084000         TRANS.PRR         (UC)           Δ         Q101         VF872700         TR         252C1405 R, S         A         T101         X038400         TRANS.PRR         (UC)           Δ         Q111         VF872600         TR         25A1708 S, T         A         TE101         VU38700         TRANS.PRR         (Q6)           Q111         VF872600         TR         25A1708 S, T         A         TE101         VU38700         TRANS.PRR         (R6)           Q113         VF883100         TR         25C17405 R, S         VF753100         BEAT         SN 105						Λ				
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Δ       Q121       VW996900       TR       2SC4495         Q122       iC174020       TR       2SC17405 R, S         Q123       VP68300       TR       2SC1800 A, E(R)         Q124       VP883100       TR       2SC1800 A, E(R)         Q124       VP80300       TR       2SC1890A, D, E(R)         Δ       Q129       VR355800       TR. PAIR       2SA1694/C4467 OPY         Δ       Q130       VR355800       TR. PAIR       2SA1694/C4467 OPY         Q133       1E000020       FET       2SK30ATM GR         Δ       R113       HV454470       R. CAR. FP       47 Ω         Λ       R114       HV454470       R. CAR. FP       2.7 KΩ         R128       HV456100       IKΩ       1/4W         R131       HV453470       R. CAR. FP       4.7 Ω         R133       HV453470       R. CAR. FP       4.7 Ω         R134       HV453470       R. CAR. FP       4.7 Ω         R135       HV453470       R. CAR. FP       4.7 Ω         R137       V981700       R. MTL. PLAT       0.22 Ω+0.22       3W         Δ       R137       V981700       R. MTL. PLAT       0.22 Ω+0.22       3W <th>Δ</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Δ									
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				TR	2SC4466 0, P, Y(R)					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			VP883100	TR	2SC1890A D, E(R)					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$\triangle$	Q128	VR402300	TR						
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Δ       R114       HV454470       R.CAR. FP       47 Ω       1/4W         R127       HV456270       R.CAR. FP       2.7K Ω       1/4W         R128       HV456270       R.CAR. FP       2.7K Ω       1/4W         R131       HV456100       IK Ω       1/4W         R131       HV456100       IK Ω       1/4W         R132       HV456100       IK Ω       1/4W         R133       HV453470       R.CAR. FP       4.7 Ω       1/4W         R134       HV453470       R.CAR. FP       4.7 Ω       1/4W         R135       HV453470       R.CAR. FP       4.7 Ω       1/4W         R136       HV453470       R.CAR. FP       4.7 Ω       1/4W         R136       HV453470       R.CAR. FP       4.7 Ω       1/4W $R136$ HV453470       R.CAR. FP       4.7 Ω       1/4W $R138$ V981700       R.MIL. PLAT       0.22 Ω+0.22       3W $\Delta$ R145       H1314100       R.MIL. OXD       10 Ω       1/4W $\Lambda$ R146       H314100       R.MIL. OXD       330 Ω       IW $R$ R152       HV454100       R.CAR. FP       10 Ω<		Q133								
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R128       HV456270       R. CAR. FP       2. 7K $\Omega$ 1/4W         R131       HV456100       IK $\Omega$ 1/4W         R132       HV456100       IK $\Omega$ 1/4W         R133       HV453470       R. CAR. FP       4. 7 $\Omega$ 1/4W         R134       HV453470       R. CAR. FP       4. 7 $\Omega$ 1/4W         R135       HV453470       R. CAR. FP       4. 7 $\Omega$ 1/4W         R136       HV453470       R. CAR. FP       4. 7 $\Omega$ 1/4W         R136       HV453470       R. CAR. FP       4. 7 $\Omega$ 1/4W $\Delta$ R137       VU981700       R. MIL. PLAT       0.22 $\Omega$ +0.22       3W $\Delta$ R138       VU981700       R. MIL. PLAT       0.22 $\Omega$ +0.22       3W $\Delta$ R145       HL314100       R. MIL. OXD       10 $\Omega$ 1W $\Delta$ R146       HL314100       R. MIL. OXD       10 $\Omega$ 1W $R151$ HV454100       R. CAR. FP       10 $\Omega$ 1/4W         R152       HV454100       R. CAR. FP       10 $\Omega$ 1/4W         R160       HL315330       R. MIL. OXD       330 $\Omega$ IW <t< th=""><th><math>\triangle</math></th><th>R114</th><th></th><th></th><th></th><th></th><th></th><th>1. A. A.</th><th></th><th></th></t<>	$\triangle$	R114						1. A.		
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$\triangle$ R171 HL315680 R. MTL. OXD 680 $\Omega$ 1W										
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	⚠			K. MIL. UXD						
		K1/3	пv456100		1K12 1/4W					

\* New Parts

\* New Parts

RX-396 P.C.B. INPUT

	Schm Ref.	PART NO.	Desci	iption	
ĸ	<u></u>	V2054800	P.C.B.	INPUT(UCA	<u></u>
*		V2054600 V2054900	P. C. B.	INPUT (OCA INPUT (RG)	/
	CB102	VX024600	CN. BS. PIN	2P(UCA)	
	CB102 CB103	VQ961500	CN. BS. PIN	12P	
	CB103	VQ963300	CN. BS. PIN	12P	
	CB104 CB105	Vi878600	CN. BS. PIN	8P	
	CB105	VK025200	CN. BS. PIN	8P	
1	CB100	VU271600	CN DO. 1 IN	16P	
	CB107	VQ963600	CN. BS. PIN	15P	
	CB111	Vi878400	CN. BS. PIN	6P	
	C101	UA652100	C. MYLAR	100pF	50V
	C102	UA652220	C. MYLAR	220pF	50V
	C103	UA652100	C. MYLAR	100pF	50V
	C104	UA652220	C. MYLAR	220pF	50V
	C105	VF466800	C. CE. TUBLR	100pF	50V
	C106	VF466800	C. CE. TUBLR	100pF	50V
	C107	VF466800	C. CE. TUBLR	100pF	50V
	C108	VF466800	C.CE.TUBLR	100pF	50V
	C109	VF466800	C.CE.TUBLR	100pF	50V
	C110	VF466800	C.CE.TUBLR	100pF	50V
	C111	VF466700	C.CE.TUBLR	47pF	50V
	C112	VF466700	C. CE. TUBLR	47pF	50V
	C113	VF466800	C.CE.TUBLR	100pF	50V
	C114	VF466800	C.CE.TUBLR	100pF	50V
	C115	VF466700	C.CE.TUBLR	47pF	50V
	C116	VF466700	C. CE. TUBLR	47pF	50V
	C123	VC815000	C.EL	220uF	6.3V
	C124	UA653910	C. MYLAR	9100pF	-50V
	C125	UA653910	C. MYLAR	9100pF	50V
	C126	VC815000	C. EL	220uF	6.3V
	C127	VJ839200	C. EL	2.2uF	50V
	C128	UA653330	C. MYLAR	3300pF	50V
	C129	VJ837200	C. EL	47uF	16V
	C130	UA654330	C. MYLAR	0.033uF	50V
	C131	UA654330	C. MYLAR	0.033uF	50V
	C132	UA653330 VJ837200	C. MYLAR C. EL	3300pF	50V
	C133 C134	VJ837200 VJ839200	C.EL	47uF 2.2uF	16V 50V
	C134 C137	VH053100	C. CE. TUBLR	0.1uF	50V
	C137	VH053100	C. CE. TUBLR	0.1uF	50V
	C138 C139	VG722100	C.EL	luF	50V
	C139 C140	VH053100	C. CE. TUBLR	0. 1uF	50V
	C140 C141	UJ638470	C.EL	470uF	16V
	C141	UA652100	C. MYLAR	100pF	50V
	C142	UA652100	C. MYLAR	100pF	50V
	C144	VJ837200	C. EL	47uF	16V
	C145	VJ837200	C. EL	47uF	16V 16V
	C147	VJ839000	C. EL	0.47uF	50V
	C148	UA652100	C. MYLAR	100pF	50V
	C149	VG291200	C. EL	47uF	50V
	C150	VJ839200	C.EL	2.2uF	50V
	C151	VG291200	C. EL	47uF	50V
	C152	VJ839200	C. EL	2.2uF	50V
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Schm Ref.	PART NO.	Desci	ription	
C153		C. MYLAR	100pF	50V
C155	VJ839000	C.EL	0.47uF	50V
C156	VG290900	C.EL	10uF	50V
C157	FG211470	C.CE	47pF	50V
C160	FG211470	C.CE	47pF	50V
C161	VG290900	C.EL	10uF	50V
C162	VH053100	C.CE.TUBLR	0.1uF	50V
C164	VF466800	C.CE.TUBLR	100pF	50V
C165	VF466800	C.CE.TUBLR	100pF	50V
C166	UA655120	C. MYLAR	0.12uF	50V
C167	UA654330	C. MYLAR	0.033uF	50V
C168	UA654330	C. MYLAR	0.033uF	50V
C169	UA655120	C. MYLAR	0.12uF	50V
C170	VG279000	C. CE. TUBLR	820pF	50V
C171	UA654680	C. MYLAR	0.068uF	50V
C172	UA654680	C. MYLAR	0.068uF	50V
C173	VG279000	C. CE. TUBLR C. CE. TUBLR	820pF	50V
C201 C203	VF467300 VF467300	C. CE. TUBLR	0.01uF 0.01uF	16V(UCA) 16V(UCA)
D101	VF407500 VM974100	DIODE.ZENR	HZS5B2TD	5.0V
D101 D102	VM974100 VM975500	DIODE. ZENR	HZS12A2TD	12V
IC101	XM356A00	IC	NJM2068LD	144
IC101 IC102	XP894A00	IC	LC78211	
IC102 IC104	XF494A00	IC	LB1641	
IC104	XM356A00	IC	NJM2068LD	
JK101	VJ726800	JACK. MNI	(UCA)	
JK102	VJ726800	JACK. MNI	(UCA)	
PJ101	VN308700	JACK. PIN	6P	
PJ102	VV306900	JACK. PIN	4P	
PJ103	VV306900	JACK. PIN	4P	
Q105	VP872700	TR	2SC4488 S,	Т
Q106	iC287820	TR	2SC2878 A,	В
Q107	iC287820	TR	2SC2878 A,	В
R153	HV453220	R. CAR. FP	$2.2\Omega$	1/4W
R154	HV453220	R. CAR. FP	$2.2\Omega$	1/4W
R155		R. CAR. FP	10 Ω	1/4W
R156	HV454100	R. CAR. FP	10 Ω	1/4W
R159	HV453470	R. CAR. FP	$4.7\Omega$	1/4W
R168	HL315100	R.MTL.OXD	100Ω	1W
R175	HL315100	R.MTL.OXD	100Ω	1₩
VR101	VR710500	VR.MTR	A100KΩ	
VR102	VP741800	VR	B20K Ω	
VR103	VP741900	VR	$G25K\Omega$	
VR104	VP700700	VR	A100K Q	
VR105	VP742000 VJ828000	VR PIN	MN100KΩ IMSA-6024-	02E (11CA)
	BB071360	SCR. TERM	8.3x13(UCA	
	VR435100	PLATE	₩16	1)
	11400100	לווראו ג	HT0	

\*New Parts

\*New Parts

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RX-396 P.C.B. TUNER

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Ref.	PART NO.		ription	
	VV022300		TUNER (UC)	
	VV022400	P.C.B.	TUNER (R)	
05.4	W022500	P.C.B.	TUNER (AG)	
CB4	VQ961800	CN. BS. PIN	15P	1.017
C1	VG287800	C.EL	330uF	16V
C3	VG275800	C. CE. TUBLR	8.2pF	50V
C4	VG291200	C.EL	47uF	50V
C5	VF467300	C. CE. TUBLR	0.01uF	16V
C6 C7	VG288900 VJ839100	C. EL C. EL	100uF 1uF	25V 50V
C8	VF467300	C. CE. TUBLR	0.01uF	16V
C9	VF467300	C. CE. TUBLR	0.01uF	16V 16V
C10	VF467300	C. CE. TUBLR	0.01uF	16V
C10	VF467000	C. CE. TUBLR	1000pF	50V
C12	VJ836900	C. EL	1000p1 10uF	16V
C13	VJ836900	C. EL	10uF	16V
C14	VF466800	C. CE. TUBLR	100pF	50V
C15	VF467000	C. CE. TUBLR	1000pF	50V
C16	VF466700	C. CE. TUBLR	47pF	50V
C17	VG291200	C.EL	47uF	50V
C19	VA761200	C.CE	33pF	50V
C20	VG291200	C.EL	47uF	50V
C21	VJ599000	C. CE. TUBLR	0.047uF	16V
C22	UM216330	C.EL	3.3uF	50V
C23	VF467300	C.CE.TUBLR	0.01uF	16V
C24	UM416470	C.EL	4.7uF	50V
C25	UM216330	C.EL	3.3uF	50V
C26	VJ836900	C.EL	10uF	16V
C27	VF467300	C.CE.TUBLR	0.01uF	16V
C28	VA761200	C.CE	33pF	50V
C29	-	C.EL	1uF	50V
C30	-	C.EL	luF	50V
C31	VG291200	C.EL	47uF	50V
C32	VJ839000	C.EL	0.47uF	50V
C33	VJ839100	C. EL	luF	50V
C34	UA654470	C. MYLAR	0.047uF	50V
C35	UM216330	C.EL	3.3uF	50V
C36 C36	UA652470 UA653100	C. MYLAR C. MYLAR	470pF 1000pF	50V(AG)
C30 C37	UA652470	C. MYLAR	470pF	50V(UCR) 50V(AG)
C37	UA652470 UA653100	C. MYLAR	470pr 1000pF	50V (AG)
C38	VF466900	C. CE. TUBLR	470pF	50V (UCIK)
C39	VJ836900	C.EL	10uF	16V
C35 C40	UM216330	C.EL	3.3uF	50V
C40 C41	UA653390	C. MYLAR	3900pF	50V
C41 C42	UM407220	C.EL	22uF	25V
C43	UA653390	C. MYLAR	3900pF	50V
C44	UM216330	C. EL	3.3uF	50V
C45	VG291200	C.EL	47uF	50V
C46	VG291200	C.EL	47uF	50V
C49	UA652120	C. MYLAR	120pF	50V(AG)
C49	UA652470	C. MYLAR	470pF	50V (UCR)
C50	VJ599000	C. CE. TUBLR	0.047uF	16V
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\* New Parts

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Schm Ref.	PART NO.	Desc	ription
	r	1	· · · · · · · · · · · · · · · · · · ·
D1	VD631600	DIODE	1SS133, 176, HSS104
D2	VD631600	DIODE	1SS133, 176, HSS104
D3			MTZJ5.6C 5.6V
Fi1	GG000560	FLTR.CE	SFE10. 7MS3GHY-A
Fi2	GG000560	FLTR.CE	SFE10.7MS3GHY-A
Fi3	VC219000	FLTR.CE	SFZ450JL3
IC1	XB760A00	IC	LA1266
IC2	XQ944A00	IC	LC72131
IC3	iG158100	IC	LA3401
L1	Vi546100	COIL	220uH
L2	Vi546100	COIL	220uH
L3	Vi546100	COIL	220uH
PK1	VQ987600	TUNER. PK	EXV-17296G1(AG)
PK1	VR242200		EXV-17296G1 (UCR)
PK2	VU333700	COIL.RF.AM	940536051A
Q1	iC053540	TR	2SC535 A, B, C
Q2	iC053540	TR	2SC535 A, B, C
Q3	VD678500		DTA114ES
Q3 Q4	VC218900	TR DOI	2SC3330 R, S, T
Q5	VG722000	TR. DGT	DTC144ES
Q6	iC1815C0	TR DOT	2SC1815 Y
Q7	VD678500	1	DTA114ES
SW1	VS602600		SS070-P022 A(R)
T1	VC218600		10.7MHz
T2	VR895700	COIL. IF	450KHz
T3	VT486800	COIL	XYA2(AG)
T4	VQ138200	FLTR.LC	19KHz
T5	VQ138200	FLTR. LC	19KHz
TE1	VU477800	TERM. ANT	AJ-2038-040
TP1	VT969000	PIN. TEST	IRS-2049
TP2	VT969000	PIN. TEST	IRS-2049
VR1	VJ694000		Β47ΚΩ
VR2	VJ694000		B47KΩ
XL1	QU003800	RSNR. CRYS	7.2MHz
XL2	GG000750	RSNR. CE	18.95KHz
Λιμ	BB071360	SCR. TERM	8. 3x13
	VR282500	PLATE	ANT.
	VIV707200	TLAIE	ANT.
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#### **RX-496 P.C.B. OPERATION**

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	Schm Ref.	PART NO.	Desc	ription		Schm Ref.	PART NO.	Desci	ription
	Ner.			-					
*			P.C.B.	OPERATION (UC)		SW28	V2014900	SW. TACT	EVQ21304M
*		V2054500		OPERATION(R)		SW29	V2014900	SW. TACT	EVQ21304M
*	0D#	V2207500		OPERATION(A)		SW30	V2014900	SW. TACT	EVQ21304M
	CB5	Vi878800	CN. BS. PIN	10P		U1		L. DICT	GP1U271X
	CB6	VU271600	CN CN	16P		V1		FL. DSPLY	13-BT-140GK
	CB7		CN. BS. PIN	2P(UCA)		XL1	VD827600	RSNR.CE	4MHz
	C16		C. CE. TUBLR	0.1uF 50V			VY760000	SPACER	(UCA)
	C17	1	C. CE. TUBLR	0.01uF 16V			VR380100	SPACER	FL-T6
	C18	VJ836900		10uF 16V			VR519500	SHEET	
	C19	VJ839100		1uF 50V					
	C20	VU545000		47000uF 5.5V					
	C21	VD930900		0.1uF 25V					
	C22		C. CE. TUBLR	0.1uF 50V					
	C23	VJ839100		1uF 50V					
	C24		C. CE. TUBLR	0.1uF 50V					
	C25	UA655330		0.33uF 50V					
	C25		C. CE. TUBLR	0.1uF 50V					
	Dl		DIODE.ZENR	HZS7A2TD 7.0V					
	D2		DIODE.ZENR	HZS5C2TD 5.0V					
	D3		DIODE	1SS133, 176, HSS104					
	D4		DIODE	1SS133, 176, HSS104		:			
	D5	1	DIODE	1SS133, 176, HSS104					
	D6	1	DIODE	1SS133, 176, HSS104					
	D7		LED(re)	SIM-22ST (UCA)					
	D8		DIODE.ZENR	HZS5B2TD 5.0V					
	D13		DIODE	1SS133, 176, HSS104					
	D14		DIODE DIODE.ZENR	1SS133, 176, HSS104 HZS6A2TD 6.0V					
	D15 G1	VR463400	TERM. GND	D3.5 TP00385					
	IC4	XU108A00	IC IC	M38B57M6-103FP CPU					
	Q1		TR	2SC1740S R, S					
	$\overline{Q2}$		TR	2SA933S Q, R					
	Q3		TR	2SC1740S R, S					
	Q4		TR. DGT	DTA114ES					
	Š₩1	V2014900		EVQ21304M					
	SW2	V2014900	SW. TACT	EVQ21304M					
	SW3		SW. TACT	EVQ21304M					
	SW4		SW. TACT	EVQ21304M					
	SW5		SW. TACT	EVQ21304M				-	
	SW6	V2014900	SW. TACT	EVQ21304M					
	SW11	V2014900	SW. TACT	EVQ21304M					
	SW12		SW. TACT	EVQ21304M					
	SW13		SW. TACT	EVQ21304M					
	SW14	V2014900	SW. TACT	EVQ21304M					
	SW15	V2014900	SW. TACT	EVQ21304M					
	SW16	V2014900	SW. TACT	EVQ21304M					
	SW21	V2014900	SW. TACT	EVQ21304M					
	SW22	V2014900	SW. TACT	EVQ21304M					
	SW23	V2014900	SW. TACT	EVQ21304M					
	SW24	V2014900	SW. TACT	EVQ21304M					
	SW25	V2014900	SW. TACT	EVQ21304M					
	SW26	V2014900	SW. TACT	EVQ21304M					
	SW27	V2014900	SW. TACT	EVQ21304M					
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#### RX-496 P.C.B. MAIN

	Schm						Schm				· · · · · · · · · · · · · · · · · · ·
	Ref.	PART NO.	Desci	ription			Ref.	PART NO.	Desc	ription	
*		V2060100	4.4.4.4.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	MAIN(UC)			C139	UJ667470	C.EL	47uF	50V
*		V2060200		MAIN(R)		⚠	C139 C140	V2376100		6800uF	.63V
*		V2060300	P.C.B.	MAIN(A)		$\mathbb{A}$	C140	V2376100	C.EL	6800uF	.03V 63V
	CR101	VF728300	CN	6P		$\mathbb{A}$	C141 C142			0. 1uF	100V
		VF728200	CN. BS. PIN	10P		$\mathbb{A}$	C142	VR325400		0. 1uF	100V 100V
		VS839400	CN. BS. PIN	4P		<u>د: ۲</u>	C140	UA653100		1000pF	50V
		VS839500	CN	4P			C145	FG214100		0.01uF	50V
		VG879900	CN. BS. PIN	2P			C146	UA653100		1000pF	50V
		VR428900	CN. BS. PIN	4P			C147	UA654100		0.01uF	50V
		VR428900	CN. BS. PIN	4P		$\triangle$	C149	Ui377470		47uF	63V(R)
			HOLDER. FUS	EYF-52BC		$\triangle$	C149	VK457600		330uF	25V(UCA)
			HOLDER. FUS	EYF-52BC		_	C150	UJ648220		220uF	25V(R)
		VP206500	HOLDER. FUS	EYF-52BC(	R)		C151	VJ836900		10uF	16V(R)
		VP206500	HOLDER. FUS	EYF-52BC(			C152	UA654100		0.01uF	50V(A)
		VQ584900	CN. BS. PIN	7P	,		C153	UA654100		0.01uF	50V(A)
	CB118	VQ584900	CN. BS. PIN	7P			C154	UA654100		0.01uF	50V(A)
		VD004700	CN. BS. PIN	4P			C156	UA654100		0.01uF	50V(A)
	C101	UM416470	C.EL	4.7uF	50V		C157	UA654100		0.01uF	50V(A)
	C102	UM416470	C.EL	4.7uF	50V		C158	UA654100		0.01uF	50V(A)
	C103	UA652100	C. MYLAR	100pF	50V		C159	UA654100	C. MYLAR	0.01uF	50V(A)
	C104	UA652100	C. MYLAR	100pF	50V		C161	UA654100		0.01uF	50V(A)
	C105	FG212100	C.CE	100pF	50V		C162	UA654100	C. MYLAR	0.01uF	50V(A)
	C106	FG212100	C.CE	100pF	50V		C164	UM416470	C.EL	4.7uF	50V
	C107	UA653100	C. MYLAR	1000pF	50V ·		C165	UK665470	C.EL	0.47uF	50V
	C108	UA653100	C. MYLAR	1000pF	50V		C171	UA654100	C. MYLAR	0.01uF	50V(A)
	C109	VJ837200	C.EL	47uF	16V		C191	VH053100	C. CE. TUBLR	0. 1uF	50V
	C110	VJ837200	C.EL	47uF	16V		D101	VN008700	DIODE	1SS270A	
	C111	VR516400	C.CE	15p	500V		D102	VN008700	DIODE	1SS270A	
	C112		C.CE	15p	500V		D105	VR253700	DIODE.BRG	S1NB20 1	A 200V(R)
	C113		C.EL	47uF	50V		D106	VM976300	DIODE.ZENR	HZS242TD	24V
	C114	UJ667470		47uF	50V		D107		DIODE.ZENR	HZS242TD	24V
	C115	VG291200		47uF	50V	$\triangle$	D108		DIODE	1T2	
	C116		C.EL	47uF	50V		D109		DIODE. ZENR	HZS162TD	16V
	C117	VR325000		100pF	100V		D110		DIODE. ZENR	HZS152TD	15V
		VR325000		100pF	100V	$\triangle$	D111	iH001090	DIODE. BRG		2.6A 200V
		VR325000		100pF	100V		D112	VD631600		1SS133, 17	6,HSS104
		VR325000		100pF	100V	A	D113	VS997800		1T2(UCA)	
		UA654820		0.082uF	50V		D114		DIODE. ZENR	HZS12A2TD	
		UA654820		0.082uF	50V		D117	VD631600		1SS133, 17	
		UA655100		0.1uF	50V	$\triangle$	F101	KB001660		T1.60A 25	
		UA655100		0.1uF	50V	$\mathbb{A}$	F101	VS823000		T5.0A 12	
		UA654220		0.022uF	50V	$\mathbb{A}$	F103	KB001660		T1.60A 25	
		UA654220		0.022uF	50V	$\mathbb{A}$		VK188400		330Ω	1/4W
	C127	UA652100		100pF	50V	$\Delta$		VK188400		330Ω	1/4W
	C128		C.CE.SAFTY	0.01uF	275V			VK189000		1KΩ	1/4W
	C129	VK182500		330uF	63V			VK189000		1KΩ	1/4W
		UM416470		4.7uF	50V			VR463400			00385
		VC815000		220uF	6.3V				JACK. PHONE		2-030 NUT
		UM416470		4.7uF	50V	Δ			OUTLET. AC	2P(A)	
		UM416470		4.7uF	50V	Δ	-		OUTLET. AC	2P(UCR)	
		Vi846000		22uF	63V		L103	VP575600	COIL	1.5uH	
		UM416470		4.7uF	50V	Δ	L104	VP575600	COIL	1.5uH	P
	C138	UJ667470	C.EL	47uF	50V	Δ	Q101	VP883000	TR	2SA893A D	,E
	* New Pa				-,		* New Pa				

\* New Parts

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\* New Parts

#### RX-496 P.C.B. MAIN

	Schm	<b>D 1 D 0</b> 1 10		: .			Schm		~	
	Ref.	PART NO.	· · · · · · · · · · · · · · · · · · ·	ription			Ref.	PART NO.		ription
$\wedge$	Q102	VP883000	TR	2SA893A D, I	E	$\mathbb{A}$	RY101	VK438300		DH24D2-OT/M2
$\triangle$	Q103	VP883000	TR	2SA893A D,I		$\mathbb{A}$		VU398500		DC LK1AF-12V(UCA)
企	Q104	VP883000	TR	2SA893A D, I		$\wedge$	RY102	VY735300		DC G5P-1(R)
⚠	Q105	VR325600	TR	2SC2229 0, 1	Y .	· 🔬	SW101			PBS-YM-001
$\triangle$	Q106	VR325600	TR	2SC2229 0, 1	Y	. 🛆	SW102	VA961800	VOLT. SELCT	ESE-37247-F(R)
$\triangle$	Q107	iC174020	TR	2SC1740S R,	,S	$\wedge$	SW103	VZ361100	SW. SLIDE	SL13B-022-AMC1
$\triangle$	Q108	iC174020	TR	2SC1740S R,	, S.	Δ	T101	XC083A00	TRANS. PWR	(UC)
$\triangle$	Q109	VP872700	TR	2SC4488 S, 7	Γ	⚠	T101	XC084A00	TRANS. PWR	(A)
$\triangle$	Q110	VP872700	TR	2SC4488 S, 1	Г	$\mathbb{A}$	T101	XT331A00	TRANS. PWR	(R)
$\triangle$	Q111	VP872600	TR	2SA1708 S,1		$\mathbb{A}$	TE101	VC313700	TERM. SP	8P
$\triangle$	Q112	VP872600	TR	2SA1708 S,1	Г			VJ828000	PIN	IMSA-6024-03E
	Q113	VP883100	TR	2SC1890A D,				BB071360	SCR. TERM	8.3x13
	Q114	VP883100	TR	2SC1890A D,	E			VR264300	PLATE. GND	
	Q115	VP883000	TR	2SA893A D,I	E			VP753100	HEAT. SINK	IC-1625-MML
	Q116	iC174020	TR	2SC1740S R,	, S		1		SCR. BND. HD	3x16 FCRM3-BL
	Q117	iC174020	TR	2SC1740S R,	, S			VY834500	SUPRT	(RA)
	Q118	iC287820	TR	2SC2878 A, I	В					
	Q119	iC174020	TR	2SC1740S R,						
$\triangle$	Q120	iA101521	TR	2SA1015 Y						
Δ	Q121	VN996900	TR	2SC4495						
	Q122	iC174020	TR	2SC1740S R,						
	Q123	VP768300	TR	2SC4466 0, H					· .	
	Q124	VP883100	TR	2SC1890A D,	,E(R)					
À	Q128	VR402300		2SB647 C, D						
$\triangle$	Q129	VR355900		2SA1695/C44						
$\wedge$	Q130	VR355900		2SA1695/C44						
	Q133	iE000020		2SK30ATM GF	R					
Δ		HV454470			1∕4₩					
$\triangle$		HV454470			1∕4₩					
		HV456270			l∕4₩					
		HV456270			1/4W					
		HV456100			1/4W					
		HV456100			1∕4₩					
		HV453470			1∕4₩					,
:		HV453470		4.7Ω	1/4₩					
		HV453470			1∕4₩					
		HV453470			1∕4₩					
⚠	R137		R. MTL. PLAT	0.22Ω+0.22			ļ			
$\triangle$	R138	VU981700		$0.22 \Omega + 0.22$						
$\mathbb{A}$			R. MIL. OXD		1W					
$\triangle$			R. MTL. OXD		1₩					
		HV454100			l∕4₩					
	R152	HV454100			L∕4₩		1			
	R159		R. MTL. OXD	,	LW					
	R160		R. MTL. OXD		LW					
$\triangle$			R. MTL. OXD		LW					
$\land$			R. MTL. OXD		LW .					
		HV456100			L/4W					
		HV453100			l∕4₩					
		HV454100			L/4W					
		HV457100			L/4W					
			R. MTL. OXD		LW .					
	R196	HV455100	R. CAR. FP	100 Ω 1	l∕4₩					
	*New Pa	irts					* New Pa	arts		

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#### RX-496 P.C.B. INPUT

Schm Ref.	PART NO.	Desc	ription		]	Schm Ref.	PART NO.	Desc	ription	
	V2059800	P.C.B.	INPUT (UC	(A)		C148	UA652100		100pF	50V
		P.C.B.	INPUT (R)			C149	VG291200		47uF	50V
CB101	VD004500	CN. BS. PIN	2P			C150	VJ839200		2.2uF	50V
CB102	VK024600	CN. BS. PIN	2P(UCA)			C151	VG291200		47uF	50V
CB103	VQ961500	CN. BS. PIN	12P			C152	VJ839200		2.2uF	50V
CB104	VQ963300	CN.BS.PIN	12P			C153	UA652100		100pF	50V
		CN.BS.PIN	8P			C155	VJ839000	C.EL	0.47uF	50V
	VK025200	CN. BS. PIN	8P			C156	VG290900	C.EL	10uF	50V
		CN	16P			C157	FG211470		47pF	50V
	VQ963600	CN.BS.PIN	15P			C158	UA654100		0.01uF	50V
		CN. BS. PIN	11P			C159	UA654100		0.01uF	50V
		CN.BS.PIN	11P			C160	FG211470		47pF	50V
		CN. BS. PIN	6P			C161	VG290900		10uF	50V
		CN. BS. PIN	2P			C162		C. CE. TUBLR	0.1uF	50V
		CN.BS.PIN	2P			C164		C.CE.TUBLR	100pF	50V
		C. MYLAR	100pF	50V		C165		C. CE. TUBLR	100pF	50V
		C. MYLAR	220pF	50V	2	C166	UA655120		0.12uF	50V
		C. MYLAR	100pF	50V		C167	UA654330		0.033uF	50V
		C. MYLAR	220pF	50V		C168	UA654330		0.033uF	50V
C105		C. CE. TUBLR	100pF	50V		C169	UA655120		0.12uF	50V
C106		C. CE. TUBLR	100pF	50V		C170		C. CE. TUBLR	820pF	50V
		C. CE. TUBLR	100pF	50V		C171	UA654680		0.068uF	50V
		C. CE. TUBLR	100pF	50V		C172	UA654680		0.068uF	50V
		C. CE. TUBLR	100pF	50V		C173		C. CE. TUBLR	820pF	50V
1		C. CE. TUBLR	100pF	50V		C201		C. CE. TUBLR	0.01uF	16V(UCA
		C. CE. TUBLR	47pF	50V		C203		C. CE. TUBLR	0.01uF	16V(UCA
		C. CE. TUBLR C. CE. TUBLR	47pF 100pF	50V 50V		D101 D102		DIODE, ZENR	HZS5B2TD	5.0V
		C. CE. TUBLR	100pF 100pF	50V 50V		D102 D103		DIODE.ZENR LED(re)	HZS12A2TD SLR-325VC	
		C. CE. TUBLR	47pF	50V 50V		IC101		IC	NJM2068LD	
		C. CE. TUBLR	47pF	50V 50V				IC	LC78211	
		C. EL	220uF	6.3V				IC	LB1641	
		C. MYLAR	9100pF	50V			XM356A00		NJM2068LD	
		C. MYLAR	9100pF	50V			VJ726800		(UCA)	
	VC815000			6.3V			VJ726800		(UCA)	
		C. EL	2.2uF	50V			VN308700	JACK. PIN	6P	
	- 1	C. MYLAR	3300pF	50V			VV306900	JACK.PIN	4P	
		C.EL	47uF	16V				JACK. PIN	4P	
		C. MYLAR	0.033uF	50V		Q101		TR. DGT	DTC144ES	
		C. MYLAR	0.033uF	50V		Q105		TR	2SC4488 S	.Т
		C. MYLAR	3300pF	50V		Q106	iC287820	TR	2SC2878 A	
	VJ837200		47uF	16V		Q107		TR	2SC2878 A	
C134	VJ839200	C.EL	2.2uF	50V				R. CAR. FP	6.8KΩ	1/4₩
C137	VH053100	C. CE. TUBLR	0. 1uF	50V			HV453220	R. CAR. FP	$2.2\Omega$	1/4W
C138	VH053100	C.CE.TUBLR	0. 1uF	50V		R154	HV453220	R. CAR. FP	$2.2\Omega$	1/4W
		C.EL	1uF	50V		R155	HV454100	R. CAR. FP	10Ω	1/4W
		C.CE.TUBLR	0.1uF	50V				R. CAR. FP	10Ω	1∕4₩
		C.EL	470uF	16V				R. CAR. FP	4.7Ω	1∕4₩
		C. MYLAR	100pF	50V				R. MTL. OXD	100 Ω	1W
		C. MYLAR	100pF	50V				R.MTL.OXD	100 <b>Ω</b>	1₩
		C.EL	47uF	16V			VV399800	SW. PUSH	SPUN12	
	VJ837200		47uF	16V			VR710500	VR.MTR	A100KΩ	
C147	VJ839000	C. EL	0.47uF	50V		VR102	VP741800	VR	B20KΩ	

\* New Parts

\*New Parts

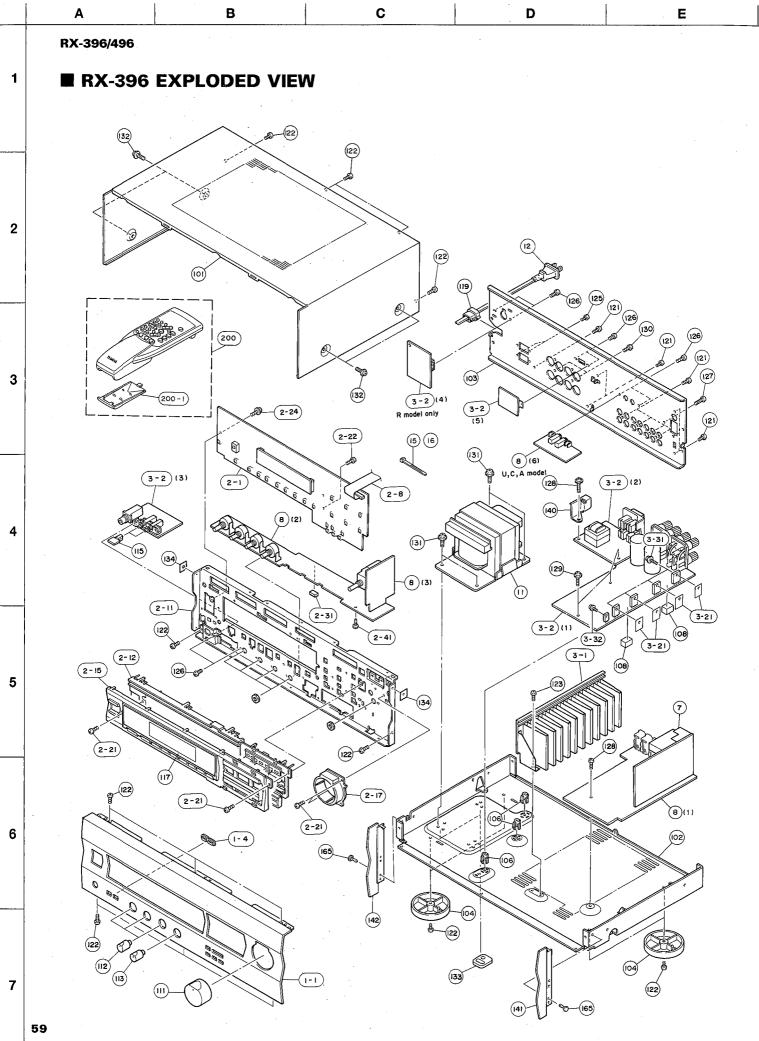
#### RX-496 P.C.B. INPUT & TUNER

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	PART NO.		ription		Schm Ref.	PART NO.		ription	
	VP741900	VR	G25KΩ		C41	UA653390		3900pF	50V
	VP700700	VR	A100KΩ		C42	UM407220		22uF	25V
VR105	VP742000	VR	MN100KΩ -		C43	UA653390		3900pF	50V
·	VJ828000	PIN	IMSA-6024	-03E(UCA)	C44	UM216330	C.EL	3.3uF	50V
i	BB071360	SCR. TERM	8.3x13(UC	A)	C45	VG291200	C.EL	47uF	50V
		PLATE	W16		C46	VG291200	C.EL	47uF	50V
					C49	UA652120		120pF	50V(A
1					C49	UA652470		470pF	50V (U
					C50		C.CE.TUBLR	0.047uF	16V
	W022300	P.C.B.	TUNER (UC)		D1	VD631600		1SS133, 17	
	W022400		TUNER(R)		D2	VD631600		1SS133, 17	
	W022500		TUNER(A)		D2 D3		DIODE.ZENR	MTZJ5.6C	
CD 4		CN.BS.PIN	15P		Fil	GG000560		SFE10. 7MS	
CB4	•		13F 330uF	16V	Fi2	GG000560		SFE10. 7MS	
C1	VG287800		1					SFZ450JL3	
C3		C. CE. TUBLR	8.2pF	50V	Fi3	VC219000			)
C4		C.FL	47uF	50V	IC1	XB760A00		LA1266	
C5		C. CE. TUBLR	0.01uF	16V	IC2	XQ944A00		LC72131	
C6		C.EL	100uF	25V	IC3	iG158100		LA3401	
C7	VJ839100		luF	50V	L1	Vi546100		220uH	
C8		C. CE. TUBLR		16V	L2		COIL	220uH	
C9		C. CE. TUBLR	0.01uF	16V	L3	Vi546100		220uH	
C10		C. CE. TUBLR	0.01uF	16V	PK1	VQ987600		EXV-17296	
C11		C.CE.TUBLR	1000pF	50V	PK1	VR242200		EXV-17296	
C12	VJ836900		10uF	16V	PK2		COIL.RF.AM	940536051	
C13	VJ836900		10uF	16V	Q1	iC053540	TR	2SC535 A,	
C14		C.CE.TUBLR	100pF	50V	Q2	iC053540	TR	2SC535 A,	B,C
C15		C. CE. TUBLR	1000pF	50V	Q3	VD678500	TR. DGT	DTA114ES	
C16		C.CE.TUBLR	47pF	50V	Q4	VC218900	TR	2SC3330 F	R, S, T
C17		C.EL	47uF	50V	Q5	VG722000	TR. DGT	DTC144ES	
C19		C.CE	33pF	50V	Q6	iC1815C0	TR	2SC1815 Y	7
C20	VG291200	C.EL	47uF	50V	Q7	VD678500	TR. DGT	DTA114ES	
C21	VJ599000	C.CE.TUBLR	0.047uF	16V	SW1	VS602600	SW. SLIDE	SS070-P02	22 A(R)
C22	UM216330	C.EL	3.3uF	50V	T1	VC218600	COIL.DT.FM	10.7MHz	
C23	VF467300	C.CE.TUBLR	0.01uF	16V	T2	VR895700	COIL. IF	450KHz	
C24	UM416470		4.7uF	50V	T3	VT486800	COIL	XYA2(A)	
C25	UM216330		3. 3uF	50V	T4	VQ138200	FLTR.LC	19KHz	
C26	VJ836900		10uF	16V	T5	VQ138200		19KHz	
C27		C.CE.TUBLR	0.01uF	16V	TE1	VU477800		AJ-2038-0	)40
C28	VA761200		33pF	50V	TP1	VT969000		IRS-2049	-
C29	VJ839100		luF	50V	TP2	VT969000		IRS-2049	
C30	VJ839100		luF	50V	VR1	VJ694000		Β47ΚΩ	
C31	VG291200		47uF	50V	VR2	VJ694000		Β47ΚΩ	
C32	VJ839000		0.47uF	50V	XL1		RSNR. CRYS	7.2MHz	
C32	VJ839000 VJ839100		1uF	50V 50V	XL2	GG000750		18.95KHz	
C34	UA654470		0.047uF	50V 50V			SCR. TERM	8.3x13	
C34 C35	UM216330		3.3uF	50V		VR282500		ANT.	
C35 C36	UA652470		470pF	50V 50V(A)		1.202000			
C36	UA653100		1000pF	50V (A) 50V (UCR)					
C30 C37			1000pr 470pF						
	UA652470								
C37	UA653100		1000pF	50V(UCR)					
C38	•	C.CE.TUBLR	470pF	50V					
C39 C40	VJ836900		10uF	16V					
i /II I	UM216330	IU.EL	3.3uF	50V		1		·	

RX-396/496

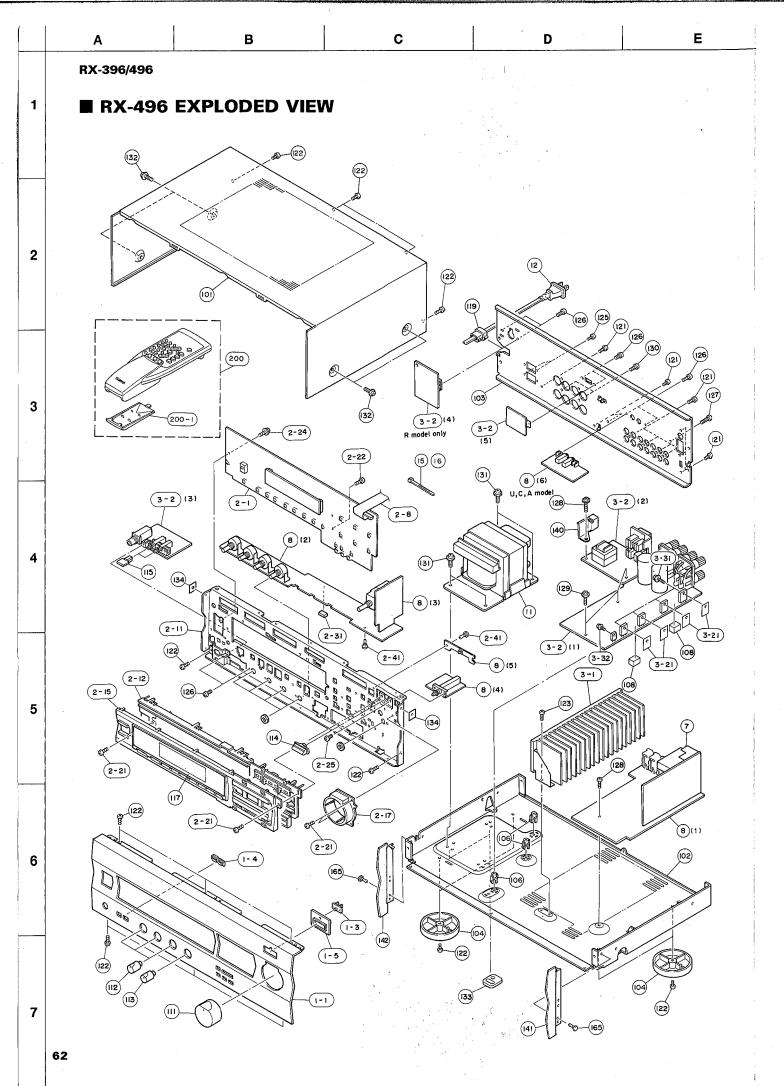


#### ■ RX-396 MECHANICAL PARTS

	Ref. No.	PART NO.	Descriptio	n	Remarks	Markets
*	1-1	VZ702100	FRONT PANEL	-	BL	
*	1-1		FRONT PANEL	· · ·	TI	
			ESCUTCHEON, 3/8	2P	BL	
	1-4		ESCUTCHEON, 3/8	2P	TI	
*	2-1		P.C.B. ASS'Y	OPERATION		(UC)
*	$2^{-1}$ 2-1		P.C.B. ASS'Y	OPERATION		(R)
*	$2^{-1}$ 2-1		P.C.B. ASS'Y	OPERATION		(GA)
*	2-1 2-1		P.C.B. ASS'Y	OPERATION		(A)
-	2 - 1 2 - 8		FLEXIBLE FLAT CABLE	16P 200mm		(11)
*			SUB CHASSIS			
*	2-11				BL	
*	2-12		BUTTON CASE 6		TI	
	2-12		BUTTON CASE 6			
*	2-15		SUB PANEL CASE 6		BL	
*	2-15		SUB PANEL CASE 6		TI	
	2-17		ESCUTCHEON, VOL		BL	
	2-17		ESCUTCHEON, VOL		TI	
	2-21		BIND HEAD B-TITE SCREW	3x8 FCRM3-BL		
	2-22		BIND HEAD P-TITE SCREW	3x8 ZMC2-BL		
	2-24		PW HEAD B-TITE SCREW	3x8-8 MFC2		
	2-31	VZ092400		6x5x10		
	2-41		PUSH RIVET	Р3545-В	•	
*	3-1	VZ702500	HEAT SINK ASS'Y			
*	3-2	V2055100	P.C.B. ASS'Y	MAIN		
*	3-2	V2055200	P.C.B. ASS'Y	MAIN		(R)
*	3-2		P.C.B. ASS'Y	MAIN		(A)
*	3-2		P.C.B. ASS'Y	MAIN		(G)
	3-21	VK195900		19x24		
	3-31		SCREW, TRANSISTOR	3x15 SP FCM3		
	3-32		BIND HEAD B-TITE SCREW	3x8 FCRM3-BL		
	7		P.C.B. ASS'Y	TUNER		(UC)
	7		P.C.B. ASS'Y	TUNER		(R)
	7		P.C.B. ASS'Y	TUNER		(AG)
*	8		P.C.B. ASS'Y	INPUT		(UCA)
*	8		P.C.B. ASS'Y	INPUT		(RG)
<b>∆</b> *	o 11		POWER TRANSFORMER	1111 01		
			POWER TRANSFORMER			(C)
<b>≜</b> *	11					(C) (R)
^*	11		POWER TRANSFORMER			$(\mathbf{A})$
<b>≜</b> *	11		POWER TRANSFORMER			(A) (G)
<b>∆</b> *	11		POWER TRANSFORMER			
$\triangle$	12		POWER CORD ASS'Y			(A)
⚠	12		POWER CORD ASS'Y			$(\mathbf{R})$
⚠	12		POWER CORD ASS'Y			(G)
⚠	12		POWER CORD ASS' Y			(UC)
	15		BINDING TIE	CBTD001B		
	16		BINDING TIE	SE140 L=140		
	101		TOP COVER		BL	
	101		TOP COVER		ΤI	
	102	VQ794000	CHASSIS			·
*	103	VZ556900	REAR PANEL			(U)
*	103		REAR PANEL			(C)
*	103		REAR PANEL			(R)
*	103		REAR PANEL			(A)
*	103		REAR PANEL			(G)
					·	ll

Ref. No.	PART NO.	Descriptio	n		Remarks	Market
104		LEG	D60xH21			
104		SPACER	H8			
	1	DAMPER, PCB	10			
108	VQ366100		DIO		DI	
111	W148800	KNOB	D40		BL	
111	W148900	KNOB	D40		TI	
112	VV311000	KNOB	D14		BL	
112	VV311400	KNOB	D14		TI	
113	VZ529900	KNOB	D14L		BL	
113	VZ530000	KNOB	D14L		TI	
115	VV123500	BUTTON, 3/8			BL	
115	W123600	BUTTON, 3/8			TI	
117	VZ702600	SHEET, WINDOW				
117	VN158600	CORD STOPPER	No. 2104		-	
	1	BIND HEAD BONDING B-T. SCREW	3x8	MFZN2-BL		
121	VN413300				1	
122		BIND HEAD B-TITE SCREW	3x8	FCRM3-BL		
123		BIND HEAD TAPPING SCREW	3x4	ZMC2-Y		
125	1	BIND HEAD B-TITE SCREW	3x8	ZMC2-Y		
126		BIND HEAD SCREW	3x6	FCRM3-BL		
127	VS997700	BIND HEAD S-TITE SCREW	3x10	MFNI33		
128		PW HEAD B-TITE SCREW	3x8-8	MFC2		
129		PW HEAD B-TITE SCREW	3x15-8	MFC2		
130	VY731200	BONDING HEAD TAPPING SCREW	3x10	MFNI33		
131	EK365090	PW HEAD S-TITE SCREW	4x8-10	FCRM3-BL	· · ·	
131	EK365090	PW HEAD S-TITE SCREW	4x8-10	FCRM3-BL	RI	
			4x8-10 4x8-10	FNM3-BL	TI	
132	EX601150	BW HEAD S-TITE SCREW		LUM9-DF	111	
133	VY731400	DAMPER	HOLE			1
134		DAMPER	SIDE			
140	VZ319700	STOPPER	SCREW			(RAG) ·
141	VV124500	PLATE SIDE R	130		BL	
141	W124600	PLATE SIDE R	130		TI	
142	VV124300	PLATE SIDE L	130		BL	
142	W124400	PLATE SIDE L	130		TI	
165	VQ368600	PUSH RIVET	P3555-B			
		ACCESSORIES				
200	VZ453500	REMOTE CONTROL TRANSMITTER	SBGH20035	A RAX7		
200-1	1	LID	74x34BLAL			
200-1				LO LO		
		ANTENNA, FM	1P 1.4m			
		ANTENNA, AM LOOP	1P 1.0m			
	VT948000	ANTENNA ADAPTER		200		
		BATTERY, MANGANESE	SUM-3, AA,	K06		
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\* New Parts



### **RX-496 MECHANICAL PARTS**

	Ref. No.	PART NO.	Descriptio	on	Remarks	Markets
*	1-1	1	FRONT PANEL			
	1-3		LENŜ, LED	D2		
	1-4	W123700	ESCUTCHEON, 3/8	2P		
	1-5	W185400	ESCUTCHEON	8x26		
*	2-1	V2054400	P.C.B. ASS'Y	OPERATION		(UC)
*	2-1		P.C.B. ASS'Y	OPERATION		(R)
*	2-1		P.C.B. ASS'Y	OPERATION		(A)
1	2-8		FLEXIBLE FLAT CABLE	16P 200mm	· · · ·	
*	2-11		SUB CHASSIS			
*	2-12		BUTTON CASE 6			
*	2-15		SUB PANEL CASE 6			
	2-17		ESCUTCHEON, VOL			
	2-17 2-21	Ei330086	BIND HEAD B-TITE SCREW	3x8 FCRM3-BL		
	2-21 2-22		BIND HEAD P-TITE SCREW	3x8 ZMC2-BL		
	2-22 2-24			3x8-8 MFC2		
			PW HEAD B-TITE SCREW			
	2-25		BIND HEAD SCREW	3x6 FCRM3-BL		
	2-31	1	DAMPER	6x5x10		
	2-41		PUSH RIVET	Р3545-В		
	3-1		HEAT SINK ASS' Y			
*	3-2		P.C.B. ASS'Y	MAIN		(UC)
*	3-2		P.C.B. ASS'Y	MAIN		$(\mathbf{R})$
*	3-2		P.C.B. ASS'Y	MAIN		(A)
	3-21	ł	SHEET	19x24		
	3-41		SCREW, TRANSISTOR	3x15 SP FCM3	· · ·	
	3–42		BIND HEAD B-TITE SCREW	3x8 FCRM3-BL		
	7		P.C.B. ASS'Y	TUNER		(UC)
	7	VV022400	P.C.B. ASS'Y	TUNER		(R)
	7		P.C.B. ASS'Y	TUNER		(A)
*	8	V2059800	P.C.B. ASS'Y	INPUT		(UCA)
*	8	V2059900	P.C.B. ASS'Y	INPUT		(R)
^*	11	XU571A00	POWER TRANSFORMER			(U)
∆*	11	XU572A00	POWER TRANSFORMER			(C)
^*	11	XU573A00	POWER TRANSFORMER			(R)
^*	11	XU574A00	POWER TRANSFORMER			(A)
Δ	12	1	POWER CORD ASS'Y			(A)
$\wedge$	12		POWER CORD ASS'Y			(R)
$\mathbb{A}$	12		POWER CORD ASS'Y			(UC)
	15		BINDING TIE	CBTD001B		()
	16		BINDING TIE	SE140 L=140		
	101		TOP COVER			
	101	1	CHASSIS			
*	102		REAR PANEL			(U)
*	103		REAR PANEL			(C)
*	103		REAR PANEL			(R)
*	103		REAR PANEL			(A)
	103		LEG	D60xH21		(1-1)
	104		SPACER	H8		
	100	VQ366100	DAMPER, PCB	10		
	108		KNOB	D40		
		W148800				
	112	W311000	KNOB	D14		
	113	VZ529900	KNOB	D14L		
	114	W185200	BUTTON 2 /0	8x26		
1	115	VV123500	BUTTON, 3/8		1	1

Ref. No.	PART NO.	Descriptio	n	Remarks	Markets
<ul> <li>117</li> <li>119</li> <li>121</li> <li>122</li> <li>123</li> <li>125</li> <li>126</li> <li>127</li> <li>128</li> <li>129</li> <li>130</li> <li>131</li> <li>132</li> <li>133</li> <li>134</li> <li>140</li> <li>141</li> <li>142</li> <li>165</li> </ul>	VN158600 VN413300 Ei330086 Ei030046 ED330066 VS997700 VT669300 VT669400 VY731200 EK365090 EK365090 VY731400 VY989400 VZ319700 VV124500	BIND HEAD B-TITE SCREW BIND HEAD TAPPING SCREW BIND HEAD B-TITE SCREW BIND HEAD SCREW BIND HEAD S-TITE SCREW PW HEAD B-TITE SCREW PW HEAD B-TITE SCREW BONDING HEAD TAPPING SCREW PW HEAD S-TITE SCREW PW HEAD S-TITE SCREW PW HEAD S-TITE SCREW DAMPER DAMPER STOPPER PLATE SIDE R PLATE SIDE L	No. 2104         3x8       MFZN2-BL         3x8       FCRM3-BL         3x4       ZMC2-Y         3x6       FCRM3-BL         3x10       MFN133         3x8-8       MFC2         3x10       MFN133         3x8-8       MFC2         3x10       MFN133         4x8-10       FCRM3-BL         4x8-10       FCRM3-BL         HOLE       SIDE         SCREW       130         130       P3555-B		(RA)
200 200–1	CX679050	ANTENNA, FM ANTENNA, AM LOOP	SBGH20035A RAX7 74x34BLALPS 1P 1.4m 1P 1.0m SUM-3, AA, R06		
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RX-396/496

\* New Parts

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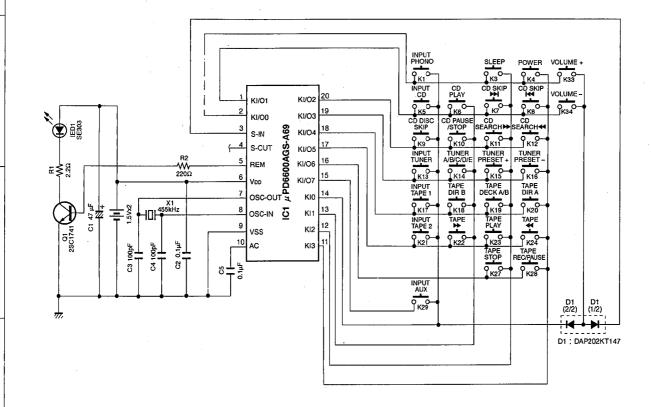
3

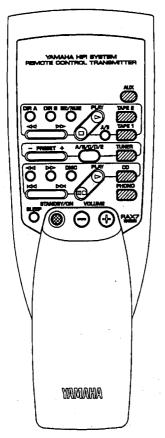
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### **REMOTE CONTROL TRANSMITTER SCHEMATIC DIAGRAM**

В

С





Key	Function	HEX		
No.	Function	CUSTOM	DATA	
1	INPUT PHONO	7A	14	
3	SLEEP	7A	57	
4	POWER	7A	1F	
5	INPUT CD	7A	15	
6	CD PLAY	7A	08	
7	CD SKIP DD	7A	0A	
8	CD SKIP ⋈⊲	7A	0B	
9	CD DISC SKIP	7A	4F	
10	CD PAUSE/STOP	7A	09	
11	CD SEARCH ⊳>	7A	0C	
12	CD SEARCH ⊲⊲	7A	0D	
13	INPUT TUNER	7A	16	
14	TUNER A/B/C/D/E	7A	12	
15	TUNER PRESET +	7A	10	
16	TUNER PRESET -	7A	11	
17	INPUT TAPE 1	7Å	18	
18	TAPE DIR B	7A	40	
19	TAPE DECK A/B	7A	06	
20	TAPE DIR A	7A	07	
21	INPUT TAPE 2	7A	19	
22	TAPE ⊳⊳	7A	02	
23	TAPE PLAY	7A	00	
24	TAPE ⊲⊲	7A	01	
27	TAPE STOP	7A	03	
28	TAPE REC/PAUSE	7A	04	
29	INPUT AUX	7A	17	
33	VOLUME +	7A	1A	
34	VOLUME -	7A	1B	

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# **Parts List for Carbon Resistors**

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No
1.0 Ω	НЈ35 3100	HF85 3100	10 kΩ	HF45 7100	HF45 7100
1.8 Ω	НЈЗ5 3180	*	11 kΩ	HF45 7110	HF45 7110
2.2 Ω	НЈ35 3220	HF85 3220	12 kΩ	НЈЗ5 7120	НF85 7120
3.3 Ω	НЈ35 3330	HF85 3330	13 kΩ	HF45 7130	HF45 7130
<u>4.7 Ω</u>	НЈЗ5 3470	HF85 3470	15 kΩ	HF45 7150	HF45 7150
	HJ35 3560	HF85 3560	13 kΩ	HF45 7180	HF45 7180
<u>5.6 Ω</u>	HF45 4100	HF45 4100	22 kΩ	HF45 7220	HF45 7220
<u>10 Ω</u>				HF45 7240	HF45 7240
15 Ω	HJ35 4150	HF85 4150	24 kΩ		
22 Ω	HF45 4220	HF45 4220	27 kΩ	НЈ35 7270	HF85 7270
27 Ω	НЈ35 4270	HF85 4270	30 kΩ	HF45 7300	HF45 7300
<u>33 Ω</u>	HF45 4330	HF45 4330	33 kΩ	HF45 7330	HF45 7330
<u>39 Ω</u>	HJ35 4470	HF85 4390	36 kΩ	HF45 7360	HF45 7360
47 Ω	HF45 4470	HF45 4470	39 kΩ	HF45 7390	HF45 7390
56 Ω	HF45 4560	HF45 4560	47 kΩ	HF45 7470	HF45 7470
<u>68 Ω</u>	HF45 4680	HF45 4680	51 kΩ	HF45 7510	HF45 7510
75 Ω	HF45 4750	HF45 4750	56 kΩ	HF45 7560	HF45 7560
82 Ω	HF45 4820	HF45 4820	62 kΩ	HF45 7620	HF45 7620
91 Ω	HF45 4910	HF45 4910	68 kΩ	HF45 7680	HF45 7680
100 Ω	HF45 5100	HF45 5100	82 kΩ	HF45 7820	HF45 7820
110 Ω	нј35 5110	HF85 5110	91 kΩ	HF45 7910	HF45 7910
120 Ω	HF45 5120	HF45 5120	100 kΩ	HF45 8100	HF45 8100
150 Ω	HF45 5150	HF45 5150	110 kΩ	HF45 8110	HF45 8110
160 Ω	низ 5160	*	120 kΩ	HF45 8120	HF45 8120
180 Ω	HF45 5180	HF45 5180	150 kΩ	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 kΩ	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 kΩ	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 kΩ	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 kΩ	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 kΩ	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 kΩ	нјз5 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 kΩ	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 kΩ	нјз5 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 kΩ	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 kΩ	нјз5 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 MΩ	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 MΩ	нј35 9120	*
1.0 kΩ	HF45 6100	HF45 6100	1.5 MΩ	нј35 9150	HF85 9150
1.2 kΩ	HF45 6120	HF45 6120	1.8 MΩ	нј35 9180	HF85 9180
1.5 kΩ	HF45 6150	HF45 6150	2.2 MΩ	НЈ35 9220	HF85 9220
1.8 kΩ	HF45 6180	HF45 6180	3.3 MΩ	НЈ35 9330	HF85 9330
2.0 kΩ	НЈ35 6200	HF85 6200	3.9 MΩ	НЈЗ5 9390	*
2.2 kΩ	HF45 6220	HF45 6220	4.7 MΩ	НЈЗ5 9470	нғ85 9470
2.4 kΩ	НЈЗ5 6240	HF85 6240	14145		
2.4 kΩ	HF45 6270	HF45 6270			
3.0 kΩ	HF45 6300	HF45 6300		· · · · · · · · · · · · · · · · · · ·	I
<u>3.3 kΩ</u>	HF45 6330	HF45 6330	·····	4	1/4W Type
<u>3.6 kΩ</u>	HJ35 6360	HF85 6360		1/4W Type	HF45 0000
		HF45 6390			1/6W Type
3.9 kΩ	HF45 6390				HF85 0000
<u>4.7 kΩ</u>	HF45 6470	HF45 6470	····	← 10mm →	← 5mm →
<u>5.1 kΩ</u>	HF45 6510	HF45 6510			
<u>5.6 kΩ</u>	HF45 6560	HF45 6560			
6.8 kΩ	HF45 6680	HF45 6680			
<u>8.2 kΩ</u>	HF45 6820	HF45 6820			
9.1 kΩ	HF45 6910	HF45 6910			

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# **RX-396/496**

# YAMAHA