



HITACHI

SERVICE MANUAL

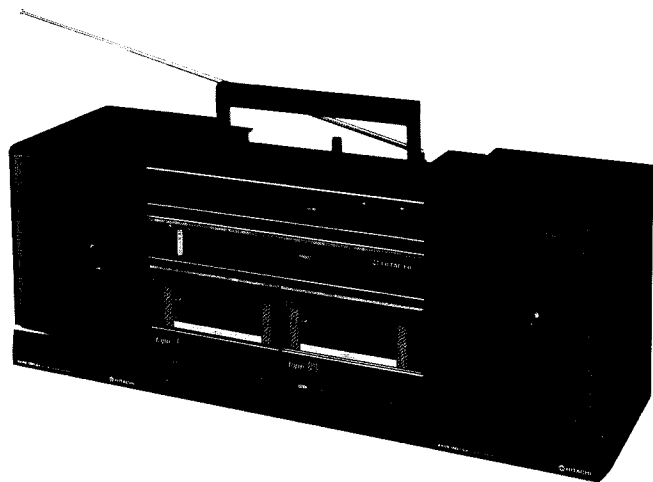
TY

No. 541E

TRK-W540

[H, HC, E, E(BS), W, AU, W(UN)]

TN-21SW-793 chassis



CONTENTS

SPECIFICATIONS	1
DISASSEMBLY	2
DIAL POINTER SETTING METHOD	3
ADJUSTMENT	4
DISCRIPTION OF NEW PARTS	8
PRINTED WIRING BOARD	9-13
CIRCUIT DIAGRAM	14-18
BLOCK DIAGRAM	19
WIRING DIAGRAM	21
EXPLODED VIEW	
Cabinet	22
Cassette chassis	23
REPLACEMENT PARTS LIST	24

SAFETY PRECAUTION

The following precautions should be observed when servicing.

1. Since many parts in the unit have special safety-related characteristics, always use genuine Hitachi replacement parts. Especially critical parts in the power circuit block should not be replaced with other makers. Critical parts are marked with Δ in the circuit diagram and printed wiring board.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

SPECIFICATIONS

RADIO SECTION

Circuit System: FM/AM 2-band Superheterodyne [for H, HC]
 FM/SW/MW/LW 4-band Superheterodyne [for E, E(BS)]
 FM/SW2/SW1/MW 4-band Superheterodyne [for W, AU, W(UN)]

Tuning Range: FM: 88 to 108 MHz [except E]
 FM: 87.5 to 108 MHz [for E]
 SW: 6 to 18 MHz [for E, E(BS)]
 SW2: 7 to 22 MHz [for W, AU, W(UN)]
 SW1: 2.3 to 7 MHz [for W, AU, W(UN)]
 MW(AM): 530 to 1,605 kHz
 LW: 150 to 285 kHz [for E, E(BS)]

Sensitivity: FM: 15 dB (pra.)
 10 dB (max.)
 SW: 32 dB (pra.)
 22 dB (max.)
 SW2: 30 dB (pra.)
 24 dB (max.)
 SW1: 46 dB (pra.)
 38 dB (max.)
 MW(AM): 50 dB (pra.)
 40 dB (max.)
 LW: 55 dB (pra.)
 46 dB (max.)

Intermediate Frequency: FM: 10.7 MHz
 MW: 465 kHz [for E, E(BS)]
 MW(AM): 455 kHz [except E, E(BS)]

Antennas (Aerials): FM/SW/SW2: Telescopic antenna
 SW1/MW(AM)/LW: Built in ferrite-core antenna

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

RADIO CASSETTE TAPE RECORDER

December 1986

TOYOKAWA WORKS

• TAPE RECORDER SECTION

Tape:	Cassette tape
Track System:	4 track 2 channel stereo
Tape Speed:	4.75 cm/sec.
Recording System:	AC bias (TAPE 2)
Erasing System:	Magnet erase (TAPE 2)
Erasing Ratio:	65 dB
Frequency Response:	Normal: 60 to 10,000 Hz
Signal to Noise Ratio:	40 dB
Wow and Flutter:	0.25% (W-RMS)
Cross talk:	Between tracks: 65 dB Between channels: 35 dB
Input sensitivity and impedance:	CD/Line-in: 700mV, 100k Ω
Output Load impedance:	Headphone 8 to 100 Ω Speakers 4 to 8 Ω
Distortion:	3%
Motor:	DC micro motor
Head:	Permalloy

DISASSEMBLY

1. Speaker box (Fig. 1)

Remove one clip to the arrow direction and remove the speaker box by pulling upward. (both side)

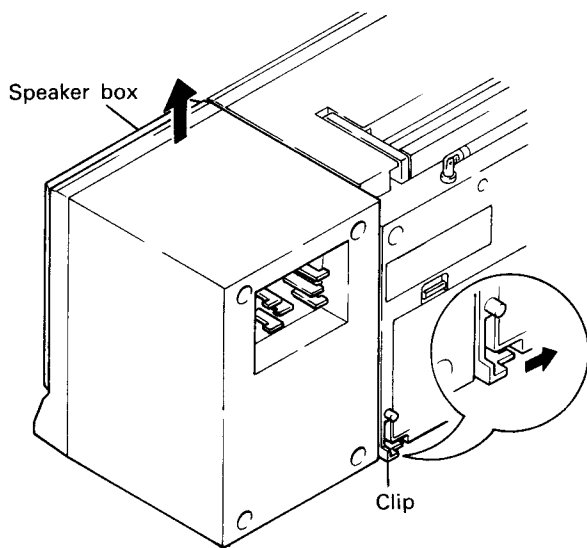


Fig.1

2. Front case (Fig. 2)

Remove four screws ①, one screw ② and one screw ③ which is in the battery case.

• GENERAL SECTION

Semiconductors:	ICs: 5
	Transistors: 17 [for H, HC] 18 [for W, AU] 20 [for E, E(BS)]
	Diodes: 11 [for E, E(BS), AU] 12 [for H, HC, W, W(UN)]
	LEDs: 2
Power supply:	AC: 120 V, 60 Hz [for H, HC] AC: 220 V, 50 Hz [for E] AC: 240 V, 50 Hz [for E(BS), AU] AC: 110-127V/200-220V/230 -250V, 50/60Hz [for W, W(UN)] DC: 12 V IEC R20 ("D" CELL) X 8 or equivalent)
Power Consumption:	18 W (except H) 14 W (for H)
Power Output:	60 W P.M.P. (AC operation) [except H, HC] 3.5W/CH (10% T.H.D. DC operation)
Speakers:	Woofer: 12 cm, 4 Ω (X2) Tweeter: 2 cm, 300 Ω (X2)
Dimensions:	580 (W) X 220 (H) X 189 (D) mm
Weight:	5.9 kg (with batteries)

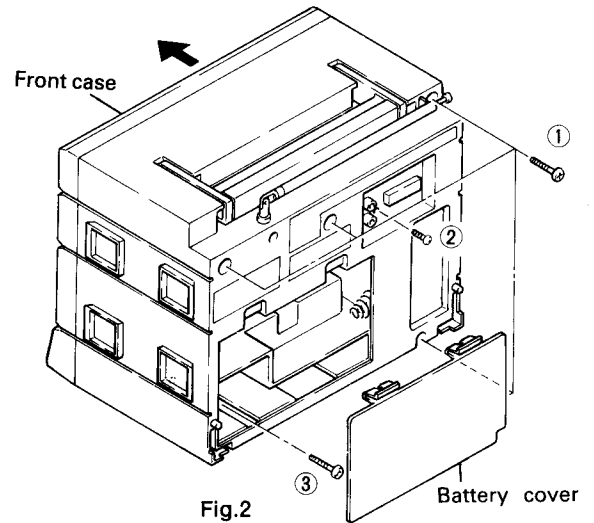


Fig.2

3. MAIN P.W.B. and GRAPHIC EQUALIZER P.W.B. (Fig. 3)

Remove one screw ④. Pull the GRAPHIC EQUALIZER P.W.B. and MAIN P.W.B., then remove five connectors. Release three clips to the arrow direction.

GRAPHIC EQUALIZER P.W.B.

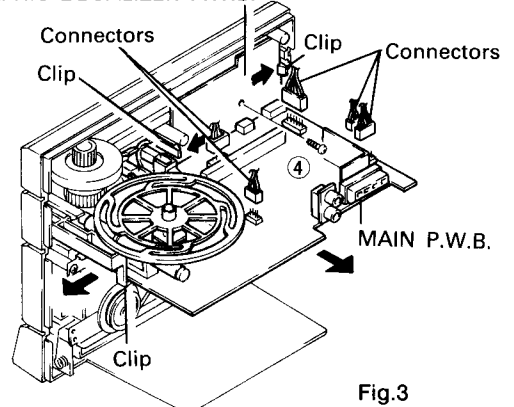


Fig.3

4. Cassette Chassis (Fig. 4)

Remove four screws ⑤.

5. HEADPHONES P.W.B. (Fig. 4)

After removing the cassette chassis, remove HEADPHONES P.W.B.

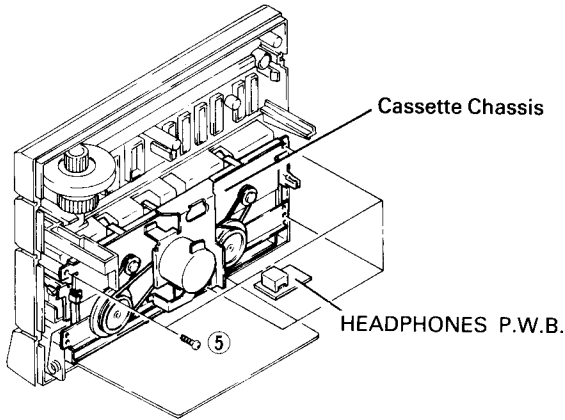


Fig.4

6. POWER SUPPLY P.W.B. (Fig. 5)

Remove two screws ⑥ and one clip.
(Clip is for W, W(UN) only)

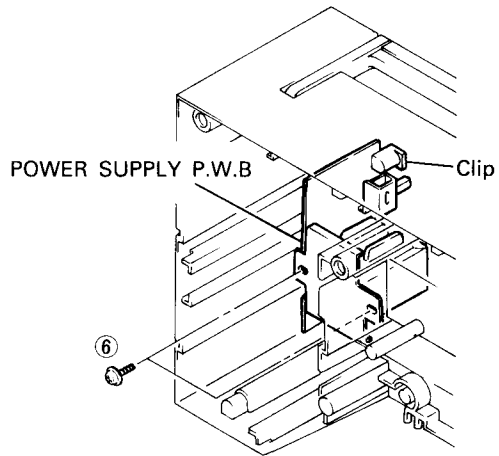


Fig.5

DIAL POINTER SETTING METHOD

Turn the Turning Knob clockwise and set the Dial pointer to setting point. Setting dial pointer, set this unit in the front case.

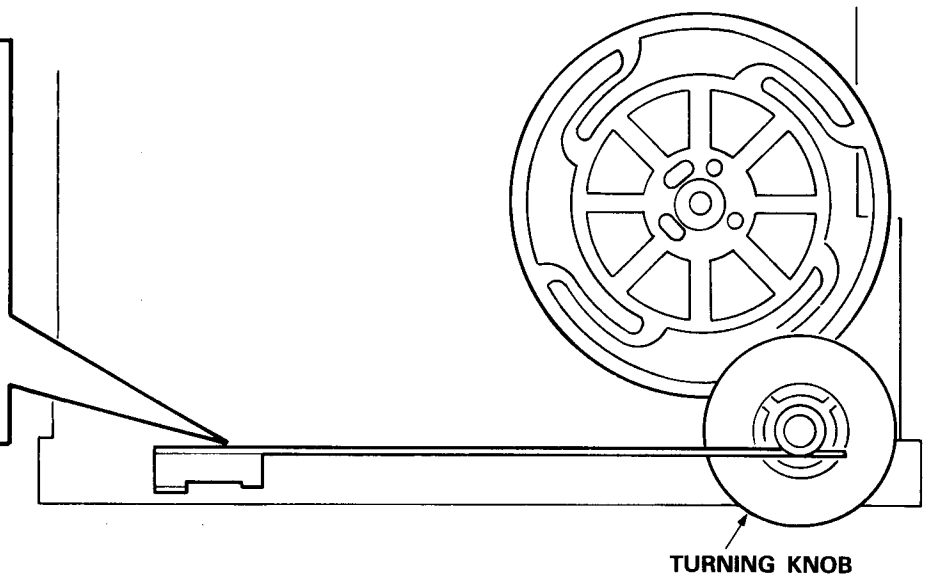
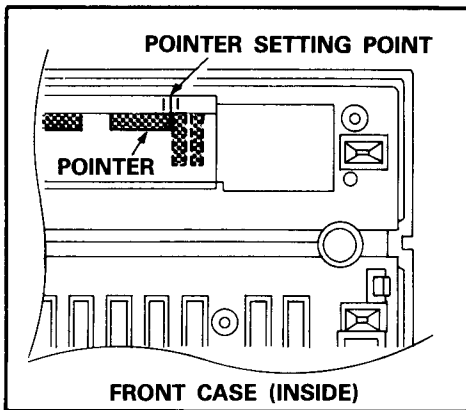


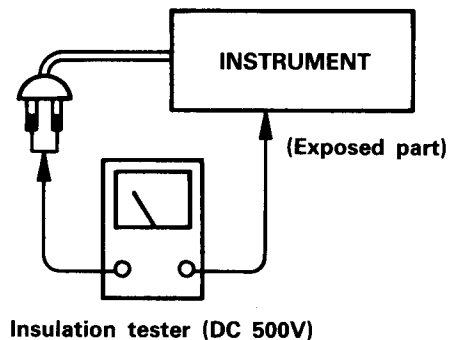
Fig.6

Check that exposed parts are acceptably insulated from the supply circuit before returning the instrument repaired to the customer.

● **Checking method**

Power switch is set to ON.

Next, measure the resistance value between the both poles of attachment cup (Power supply plug) and the exposed parts (Parts such as Knob, Cover, etc. where the customer is easy to touch.) and check that the resistance value is 500 kohms or more.



ADJUSTMENT

1. RADIO SECTION

● Adjustment point

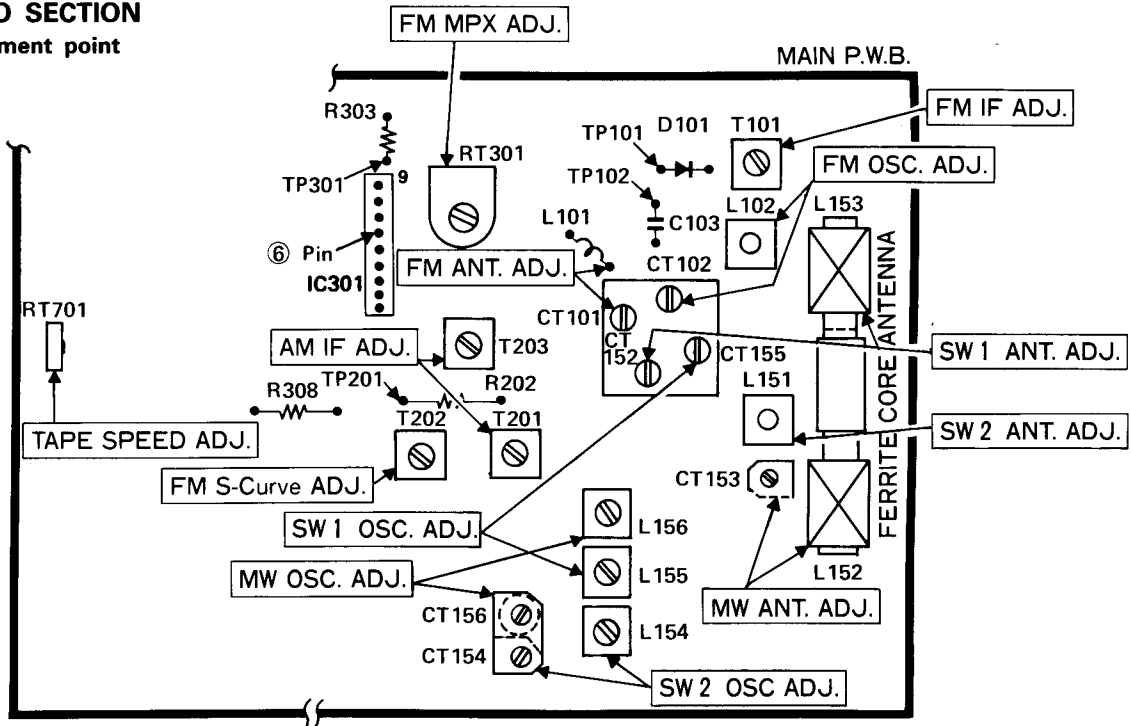


Fig.7

AM Section for W, W(UN), AU (FM/SW2/SW1/MW 4-band)

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointor Position	Adjust	Reading
		Mesuring Instrument	Input Terminal	Output Terminal ¹				
1	(1) AM IF	● Genescope (455kHz)	Ferrite-core antenna	TP201	455 kHz	Highest	T201 T203	(Note1)
					Repeat step (1).			
2	(1) SW2 OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	TP101 (through SW dummy antenna) (Note 2)	Speakers terminal	6.7 MHz	Lowest	L154	Max.
					23 MHz	Highest	CT154	
					Repeat steps (1) and (2)			
3	(1) SW2 ANT. (tracking)				8 MHz	8 MHz	L151	Max.
4	(1) SW1 OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal	2.2 MHz	Lowest	L155	Max.
					7.3 MHz	Highest	CT155	
					Repeat steps (1) and (2)			
5	(1) SW1 ANT. (Tracking)	● VTVM ● Oscilloscope			2.7 MHz	2.7 MHz	L153	Max.
					6.3 MHz	6.3 MHz	CT152	
					Repeat steps (1) and (2)			
6	(1) MW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal	515 kHz	Lowest	L156	Max.
					1,650 kHz	Highest	CT156	
					Repeat steps (1) and (2)			
7	(1) MW ANT. (Tracking)	● VTVM ● Oscilloscope			600 kHz	600 kHz	L152	Max.
					1,400 kHz	1,400 kHz	CT153	
					Repeat steps (1) and (2)			

● Adjustment point

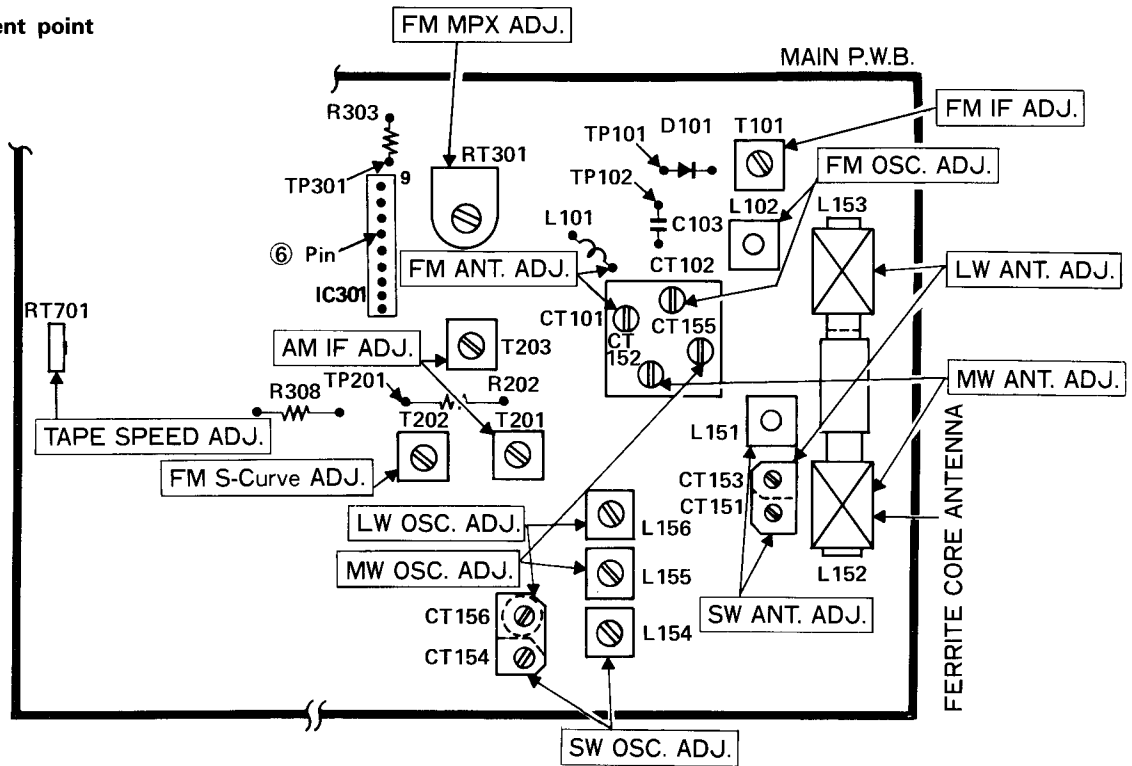


Fig.8

AM Section for E, E(BS) (FM/SW/MW/LW 4-band)

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointor Position	Adjust	Reading
		Mesuring Instrument	Input Terminal	Output Terminal1				
1	(1) AM IF	● Genescope (465kHz)	Ferrite-core antenna	TP201	465 kHz	Highest	T201 T203	(Note 1)
2	(1) (2) (3) SW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM	TP101 (through SW dummy antenna) (Note 2)	Speakers terminal	5.8 MHz	Lowest	L154	Max.
					18.5 MHz	Highest	CT154	
					Repeat steps (1) and (2)			
3	(1) (2) (3) SW ANT. (tracking)	● VTVM ● Oscilloscope			6.5 MHz	6.5 MHz	L151	Max.
					16 MHz	16 MHz	CT151	
					Repeat steps (1) and (2)			
4	(1) (2) (3) MW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM	Ferrite-core antenna (Note 3)	Speakers terminal	515 kHz	Lowest	L155	Max.
					1,650 kHz	Highest	CT155	
					Repeat steps (1) and (2)			
5	(1) (2) (3) MW ANT. (Tracking)	● VTVM ● Oscilloscope			600 kHz	600 kHz	L152	Max.
					1,400 kHz	1,400 kHz	CT152	
					Repeat steps (1) and (2)			
6	(1) (2) (3) LW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM	Ferrite-core antenna (Note 3)	Speakers terminal	145 kHz	Lowest	L156	Max.
					290 kHz	Highest	CT156	
					Repeat steps (1) and (2)			
7	(1) (2) (3) LW ANT. (Tracking)	● VTVM (RIF switch:B) ● Oscilloscope			160 kHz	160 kHz	L153	Max.
					270 kHz	270 kHz	CT153	
					Repeat steps (1) and (2)			

● Adjustment point

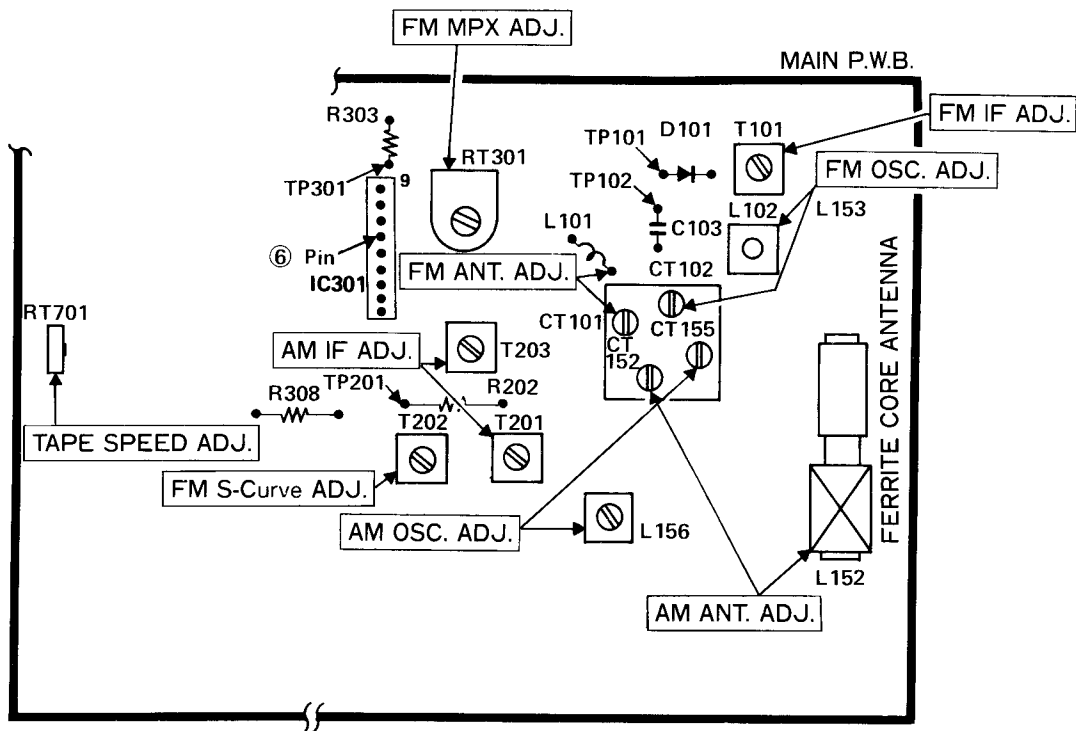


Fig.9

AM Section for H, HC (FM/AM 2-band)

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Mesuring Instrument	Input Terminal	Output Terminal1				
1	(1) AM IF	● Genescope (455 kHz)	Ferrite-core antenna	TP201	455 kHz	Highest	T201 T203	(Note 1)
2	(1) (2) (3) AM OSC. (Covering)	● AM Signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal	515 kHz	Lowest	L156	Max.
					1,650 kHz	Highest	CT155	
					Repeat steps (1) and (2)			
3	(1) (2) (3) AM ANT. (Tracking)	● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal	600 kHz	600 kHz	L152	Max.
					1,400 kHz	1,400 kHz	CT152	
					Repeat steps (1) and (2)			

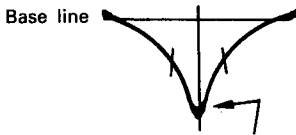
FM section

*() For W. Germany and Italy

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Mesuring Instrument	Input Terminal	Output Terminal1				
1	(1) FM IF	Turn T202 fully counterclockwise			10.7 MHz	Highest	T101	(Note 4)
	(2) S-Curve	● Genescope (10.7 MHz)	TP102	TP201			T202	(Note 5)
2	(1) FM OSC (covering)	● FM signal generator (400Hz, 30% dev.) ● Oscilloscope ● VTVM	TP101 (through FM dummy antenna) (Note 6)	Speakers terminal	87 MHz *(87.5 MHz)	Lowest	L102	Max.
					109 MHz *(108 MHz)	Highest	CT102	
					Repeat steps (1) and (2)			
3	(1) FM ANT (Tracking)	● Oscilloscope ● VTVM	TP101 (through FM dummy antenna) (Note 6)	Speakers terminal	90 MHz	90 MHz	L101	Max.
					106 MHz	106 MHz	CT101	
					Repeat steps (1) and (2)			
4	(1) FM MPX (Multiplex)	● Frequency counter	Connect a 10μ F/25V electrolytic capacitor between the NO. 1 pin of IC301 and GND	No. 6 pin of IC301	—	—	RT301	38 kHz ± 50 Hz (Note 7)

Note:

1. Feed in a weak signal from the genescope. Adjust T201, T203 for maximum gain and the waveform of Fig. 10.



Adjust the genescope output so that there is a little noise riding on the leading edge.

Fig.10

2. SW dummy antenna shows Fig. 11.

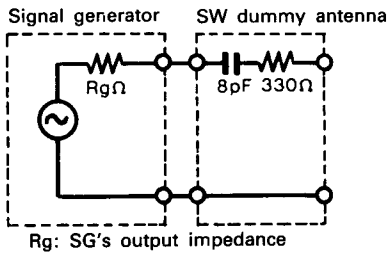


Fig.11

3. Connect AM signal generator to loop antenna, bring near to ferrite antenna.

4. Feed in a weak signal to TP102 from the genescope. Adjust T101 for maximum gain and the waveform indicated in Fig. 12. If the center of the waveform cannot be lined up on the marker, adjust the right/left balance.

Adjust the genescope output so that there is a little noise riding on the leading edge.

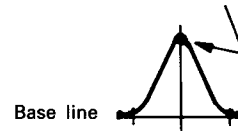


Fig.12

5. Use the T202 core to form the S-curve shown in Fig. 13. Adjust the symmetry of A and B about point C for linearity.

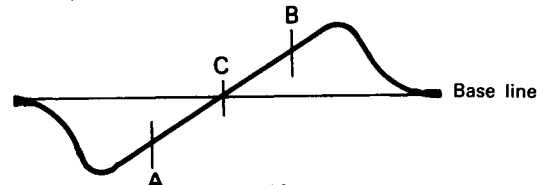


Fig.13

6. FM dummy antenna shows Fig. 14.

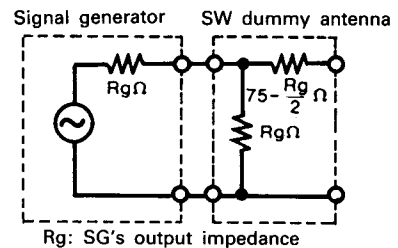
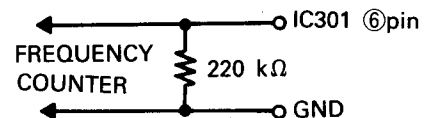


Fig.14

7. Connect the frequency counter to the No. 6 pin of IC301 and connect a 220kΩ resistor parallel with the frequency counter.



(When adjustment, short R308.)

Fig.15

ny and Italy

Reading
(Note 4)
(Note 5)
Max.
2)
Max.
2)
38 kHz ± 50 Hz (Note 7)

2. TAPE RECORDER SECTION

Perform the following adjustments in the sequence stated after cleaning the head, pressure roller, and capstan with a head cleaning stick moistened in alcohol.

Step	Adjustment Item	Measuring Instrument and Connection			Check Tape	Mode	Adjust	Reading
		Mesuring Instrument	Input Terminal	Output Terminal1				
1	Tape speed (Note 3)	● Frequency counter	—	Speakers terminal (8Ω load)	Tape speed adjustment tape (3kHz)	Playback (TAPE 2)	RT701	3kHz ± 20Hz (Note 1)
2	Head azimuth	● VTVM	—	Speakers terminal (8Ω load)	Head azimuth adjustment tape (10kHz)	Playback	Azimuth adjusting screw	Output max. (Note 2)

Note:

- Adjust within 30 sec. after heat-running for more than 20 minutes. the difference between the maximum values of both channels should be within 2 dB.
- When the maximum values of both channels are different, adjust to the maximum value of the L channel. In this case, 3. High speed adjustment is not necessary.

3. Cassette Chassis Checking and Adjustment

No.	Inspection Item	Reference Value	Remarks
1.	Pressure roller compression strength	300 to 500 g	(Note 1) Tension gage
2.	Playback torque	30 to 60 g·cm	Cassettepack system Torque meter
3.	FF/REW torque	55 to 120 g·cm	Cassettepack system Torque meter
4.	Take up back-tension	1.0 to 4.0 g·cm	Cassettepack system Torque meter
5.	Tape drive force	100 g·cm or more	
6.	Axial play of flywheel	0.05 to 0.5 mm	

Note 1 Pressure roller compression strength

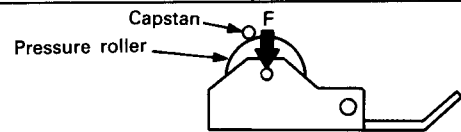


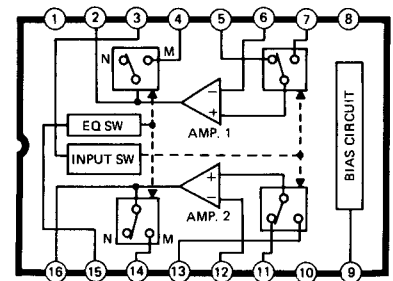
Fig.16

DISCRIPTION OF NEW PARTS

IC401 (TA7784P)

● Maximum rating (Ta=25°C)

Item	Symbol	Rating
Supply voltage	Vcc	16V
Allowable loss	Pd	750mW
Temperature of operational circuit	Topr	-30 to +75°C
Storage temperature	Tstg	-55 to +150°C



IC501 (TA7283AP)

● Maximum rating (Ta=25°C) [for H, HC]

Item	Symbol	Rating
Supply voltage	Vcc	16V
Current of output	Io (Peak)	2.5A
Allowable loss	Pd	12.5W
Temperature of operational circuit	Topr	-20 to +75°C
Storage temperature	Tstg	-55 to +150°C

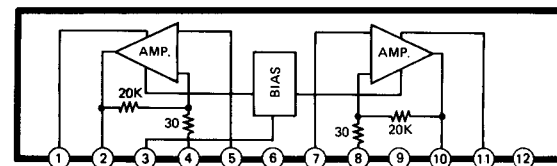
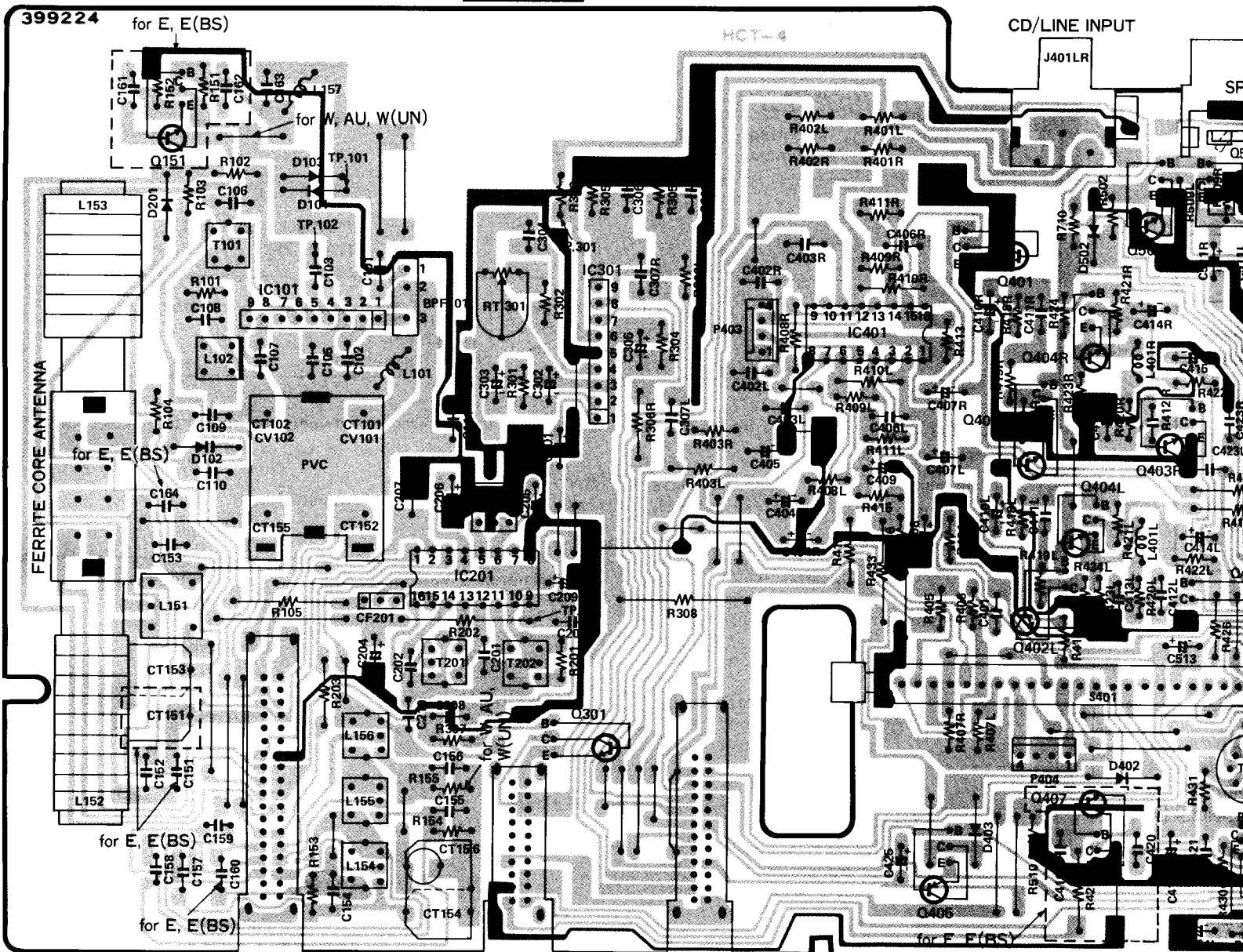


Fig.15

MAIN P.W.B.

RT301
FM MPX ADJ.



L101, CT101
FM ANT. ADJ.

L102, CT102
FM OSC. ADJ.

L152, CT152 (for E, E(BS))
MW ANT. ADJ.

L152, CT153 (for W, AU)
MW ANT. ADJ.

T101
FM IF ADJ.

IC101

Pin No.	Voltage
1	1.5
2	2.2
3	5.5
4	2.2
5	0.6
6	5.5
7	4.7
8	5.4
9	5.5

IC201

Pin No.	Voltage	Pin No.	Voltage
1	0.5 (1.4)	9	1.3
2	0.5 (1.4)	10	5.5 (6.1)
3	1.7 (2.2)	11	5.5 (6.1)
4	2.3	12	1.4
5	0.8	13	1.4
6	0.8	14	1.4
7	0.8	15	1.4
8	0	16	5.5 (6.1)

() : MW

S201
BAND SELECT SWITCH

T202
MODE SELECT/RIF(for E, E(BS))
/DUBBING SPEED
SELECT SWITCH

T201, T203
AM IF ADJ.

L151 (for W, AU)
SW 2 ANT. ADJ.

L151, CT151 (for E, E(BS))
SW ANT. ADJ.

L153, CT152 (for W, AU)
SW 1 ANT. ADJ.

L153, CT153 (for E, E(BS))
LW ANT. ADJ.

L156, CT156 (for W, AU)
MW OSC. ADJ.

L156, CT156 (for E, E(BS))
LW OSC. ADJ.

L154, CT154 (for W, AU)
SW 2 OSC ADJ.

IC301

Pin No.	Voltage
1	3.0 (3.0)
2	4.1 (4.1)
3	5.5 (6.1)
4	4.7 (4.3)
5	0
6	5.6 (5.6)
7	4.8 (6.1)
8	2.7 (3.1)
9	2.7 (3.1)

() : MW

L154, CT154 (for E, E(BS))
SW OSC. ADJ.

L155, CT155 (for W, AU)
SW 1 OSC. ADJ.

L155, CT155 (for E, E(BS))
MW OSC. ADJ.

Q301

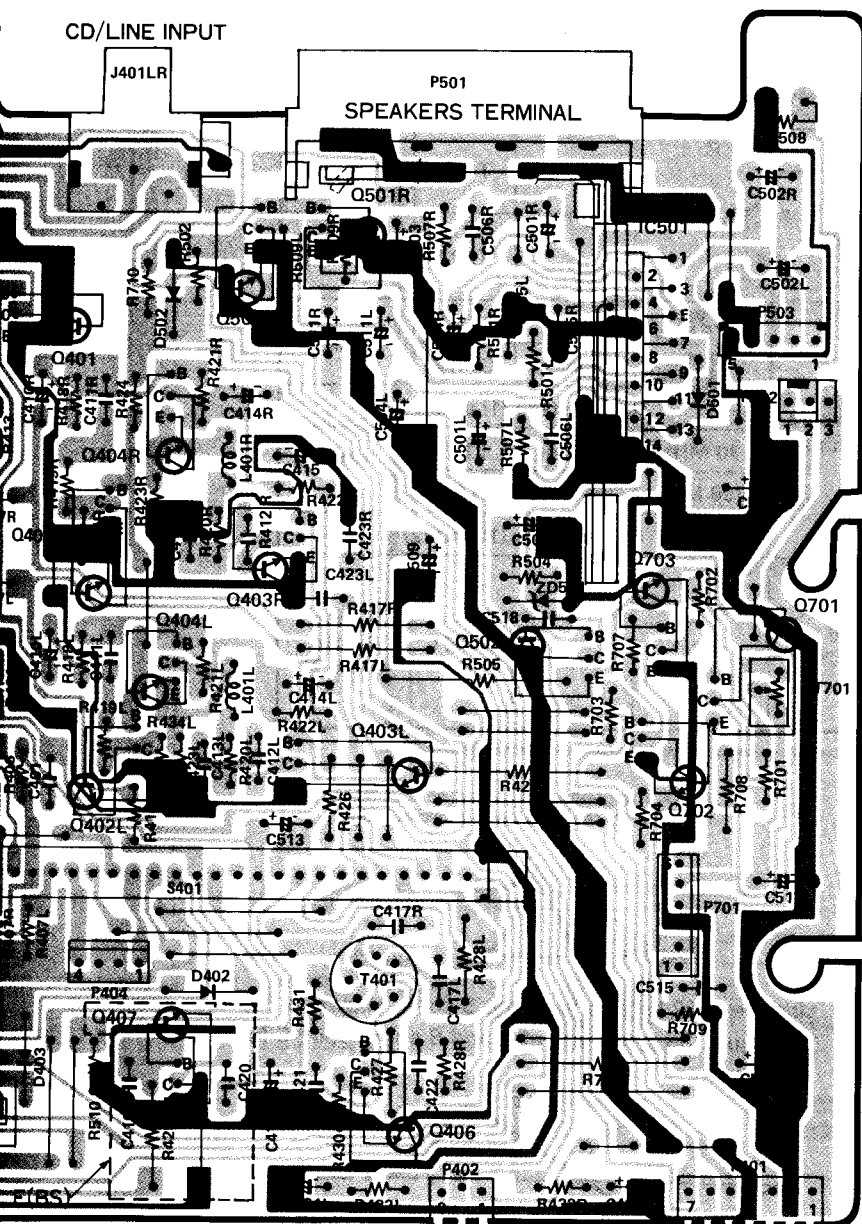
E	5.5 (6.1)
C	4.8 (6.1)
B	4.9 (5.5)

() : MW

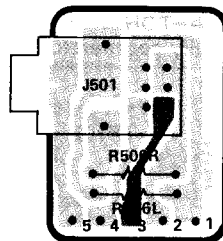
S401
REC/PLAY
SELECT SW

■ : Earth, □ : Others]

CD/LINE INPUT

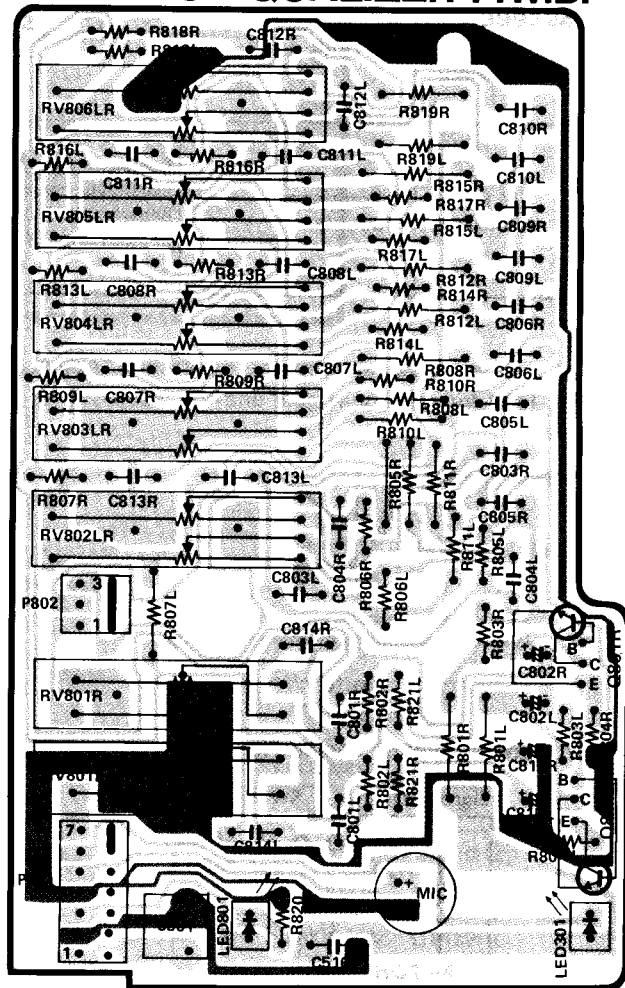


HEADPHONES P.W.B.



HEADPHONES JACK

GRAPHIC EQUALIZER P.W.B.



S401
REC/PLAY SELECT SWITCH

RT701
TAPE SPEED ADJ.

RV801L,R

VOLUME CONTROL

RV802LR~RV806LR

GRAPHIC EQUALIZER CONTROL

S501

OPERATE (POWER) SWITCH

Q301		
E	5.5	(6.1)
C	4.8	(6.1)
B	4.9	(5.5)
() : MW		

Q406		
E	(0.1)	
C	(4.9)	
B	(0.7)	
() : REC		

Q151		
E	(0.8)	
C	(6.1)	
B	(1.5)	
() : MW		

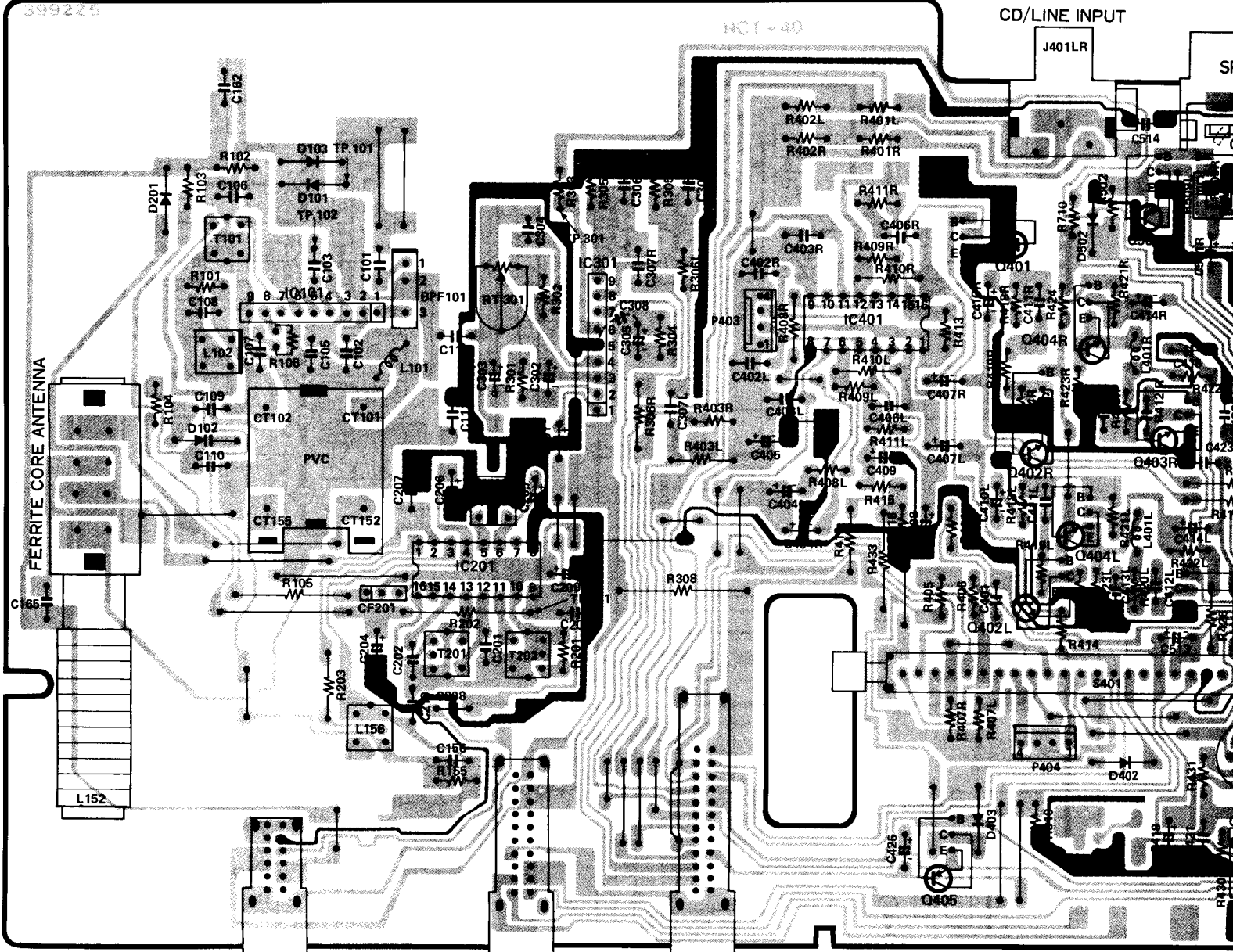
No.	Voltage	Pin No.	Voltage
6.2		9	2.2
2.2		10	
0.2		11	2.2
2.2		12	2.2
2.2		13	2.2
2.2		14	2.2
2.2		15	6.2
0		16	2.2

IC501			
Pin No.	Voltage	Pin No.	Voltage
1	6.0	8	0
2	11.5	9	1.1
3		10	11.4
4	0	11	
5	1.1	12	12.0
6	0	13	6.0
7	11.2	14	0

Q401	0	6.2	0	Q502	8.4	12.0	9.1
Q402	0	0	0	Q701	11.2	11.2	10.6
Q403	0	0	0.6	Q702	0	2.8	0
Q404	0.9	3.8	1.5	Q703	0	0	0.6
Q405	7.2	0	7.2	Q801	0.4	3.0	1.0
Q501	0	0	0				

MAIN P.W.B.

RT301
FM MPX ADJ.



L101,CT101
FM ANT. ADJ.

L102,CT102
FM OSC. ADJ.

L152,CT152
AM ANT. ADJ.

S201
BAND SELECT SWITCH

T101
FM IF ADJ.

T202
FM S-Curve ADJ.

S402
MODE SELECT /DUBBING SPEED SELECT SWITCH

L156, CT155
AM OSC. ADJ.

S403
FUNCTION SELECT SWITCH

T201, T203
AM IF ADJ.

S401
REC/PLAY SELECT SWITCH

IC101

Pin No.	Voltage
1	1.5
2	2.2
3	5.5
4	2.2
5	0.6
6	5.5
7	4.7
8	5.4
9	5.5

IC201

Pin No.	Voltage	Pin No.	Voltage
1	0.5 (1.4)	9	1.3
2	0.5 (1.4)	10	5.5 (6.1)
3	1.7 (2.2)	11	5.5 (6.1)
4	2.3	12	1.4
5	0.8	13	1.4
6	0.8	14	1.4
7		15	1.4
8	0	16	5.5 (6.1)

(): MW

IC301

Pin No.	Voltage
1	3.0 (3.0)
2	4.1 (4.1)
3	5.5 (6.1)
4	4.7 (4.3)
5	0
6	5.6 (5.6)
7	4.8 (6.1)
8	2.7 (3.1)
9	2.7 (3.1)

(): MW

IC401

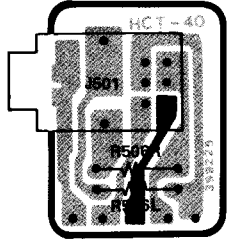
Pin No.	Voltage	Pin No.	Voltage
1	6.2	9	2.2
2	2.2	10	
3	0.2	11	2.2
4	2.2	12	2.2
5	2.2	13	2.2
6	2.2	14	2.2
7	2.2	15	6.2
8	0	16	2.2

	E	C	B	
Q401	0	6.2	0	05
Q402	0	0	0	05
Q403	0	0	0.6	07
Q404	0.9	3.8	1.5	07
Q405	7.2	0	7.2	07
Q407	0	0	0	08

IC501

Pin No.	Voltage	Pin No.	Voltage
1	10.9	7	0
2	6.0	8	0.6
3	12.0	9	0
4	0.6	10	6.0
5	0	11	10.9
6	0	12	12.0

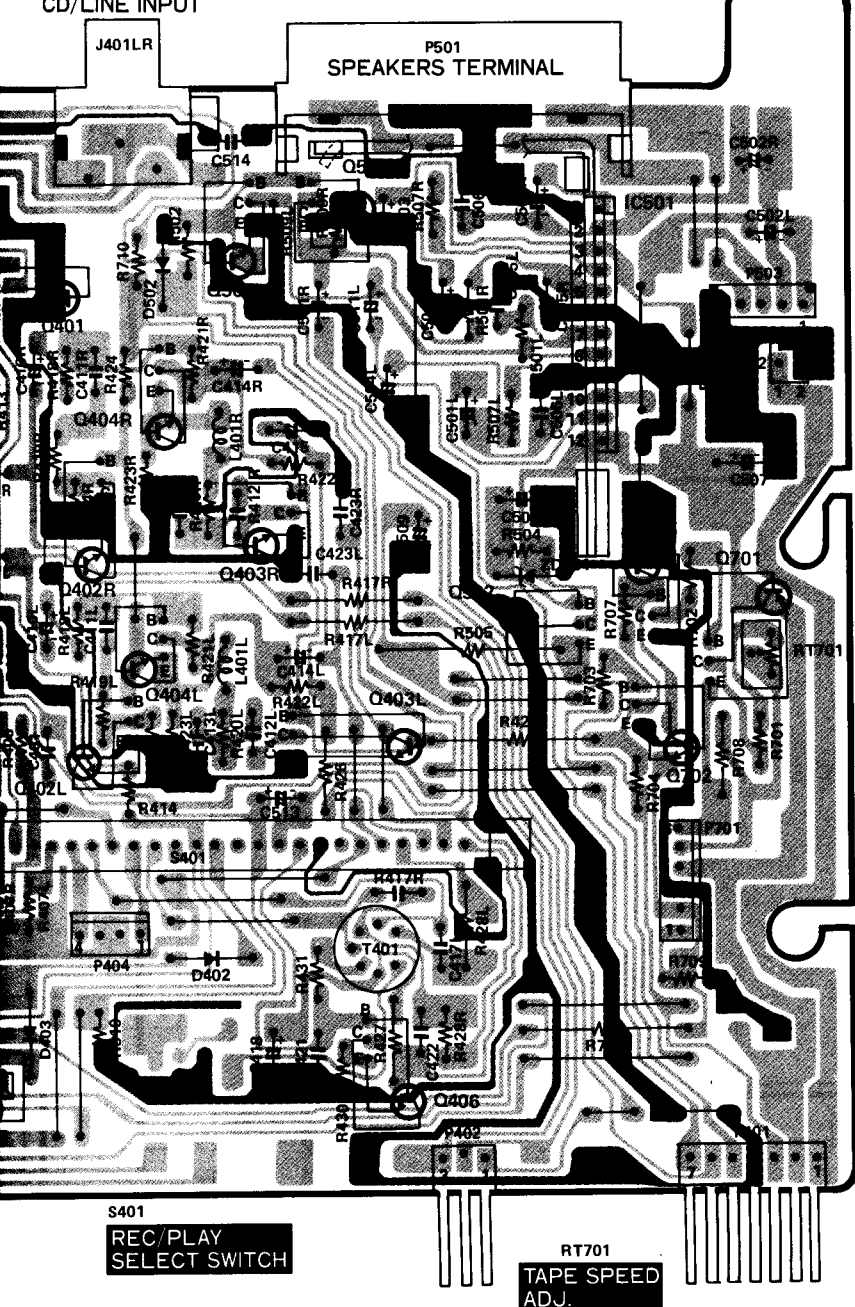
HEADPHONES P.W.B.



HEADPHONES JACK

CD/LINE INPUT

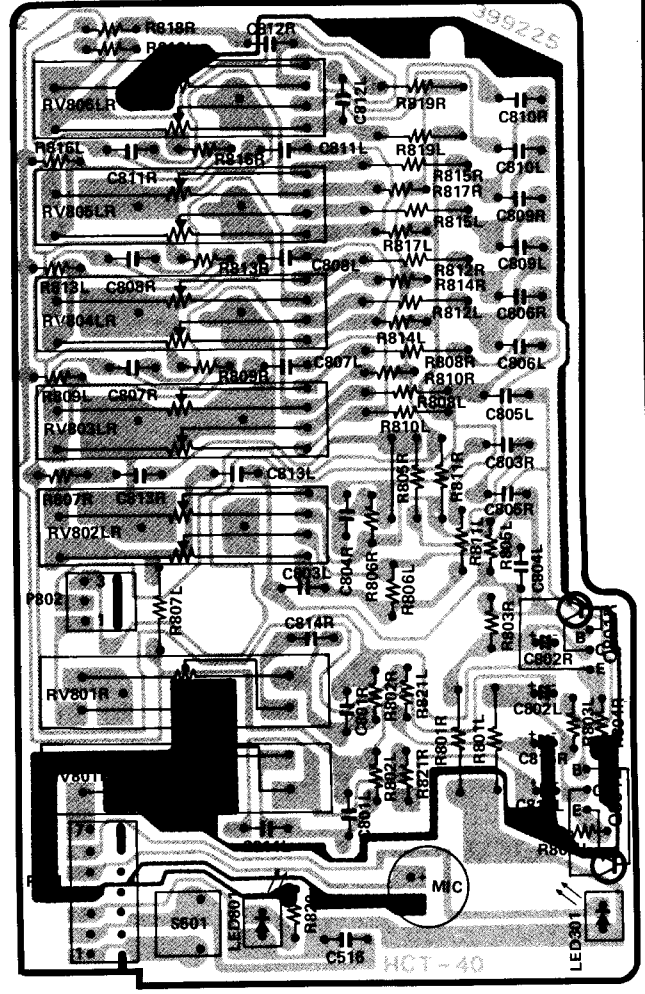
P501
SPEAKERS TERMINAL



S401
REC/PLAY
SELECT SWITCH

RT701
TAPE SPEED
ADJ.

GRAPHIC EQUALIZER P.W.B.



RV801L R
VOLUME CONTROL

S501
OPERATE
(POWER)
SWITCH

RV802LR-RV806LR
GRAPHIC EQUALIZER CONTROL

	E	C	B	Q501	E	C	B
Q401	0	6.2	0	Q501	0	0	0
Q402	0	0	0	Q502	8.4	12.0	9.1
Q403	0	0	0.6	Q701	11.2	11.2	10.6
Q404	0.9	3.8	1.5	Q702	0	2.8	0
Q405	7.2	0	7.2	Q703	0	0	0.6
Q407	0	0	0	Q801	0.4	3.0	1.0

IC501

Pin No.	Voltage	Pin No.	Voltage
1	10.9	7	0
2	6.0	8	0.6
3	12.0	9	0
4	0.6	10	6.0
5	0	11	10.9
6	0	12	12.0

Q301

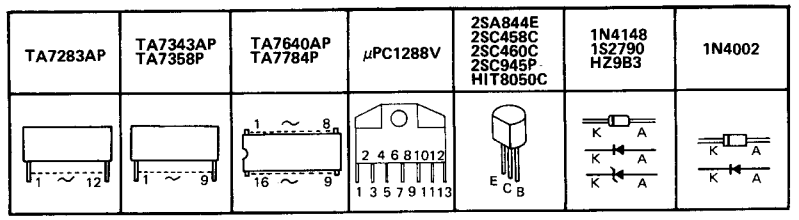
E	5.5 (6.1)
C	4.8 (6.1)
B	4.9 (5.5)

(): MW

Q406

E	(0.1)
C	(4.9)
B	(0.7)

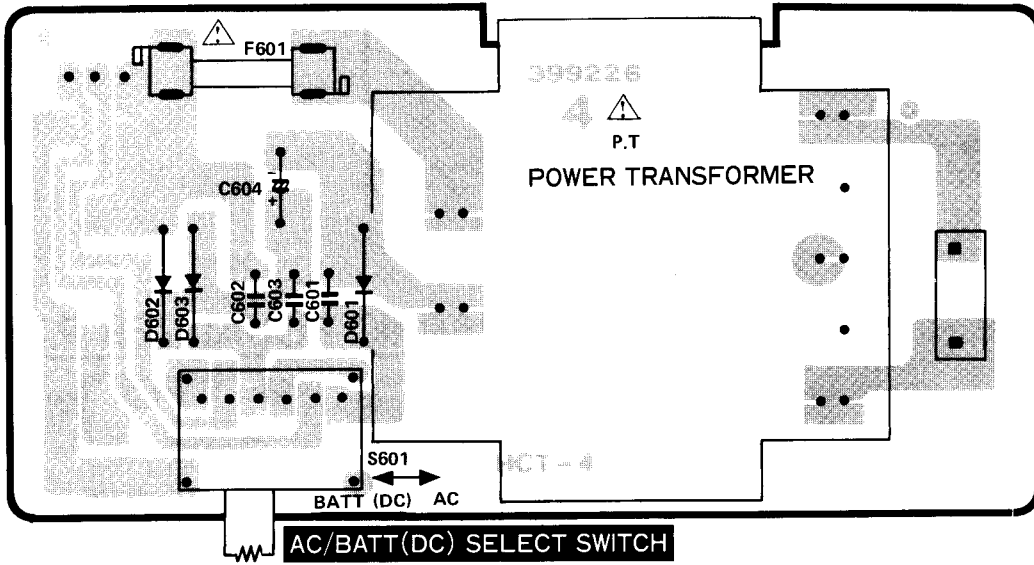
(): REC



PRINTED WIRING BOARD [: Others]

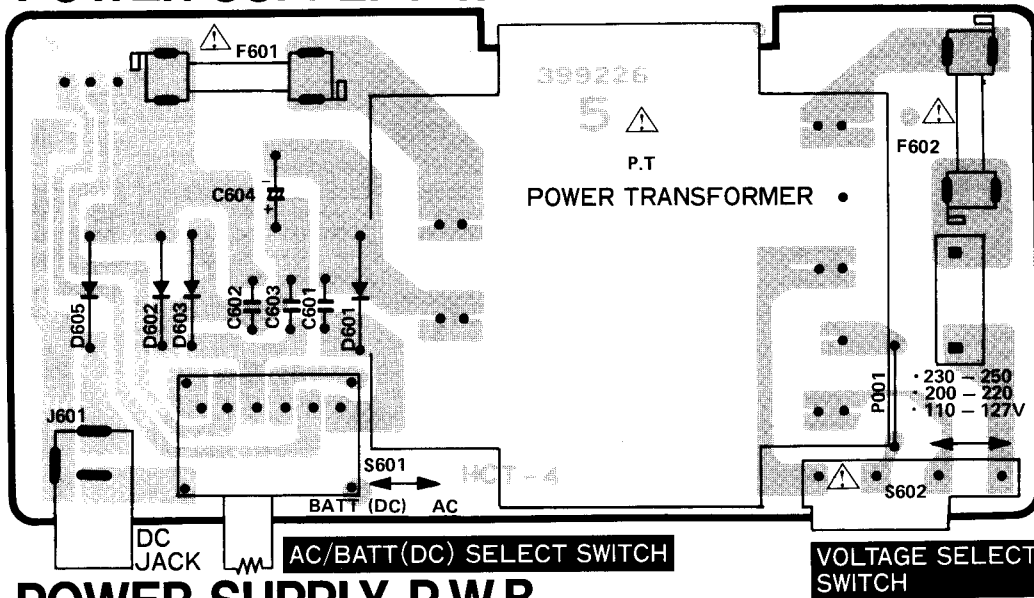
POWER SUPPLY P.W.B.

for E, E(BS), AU



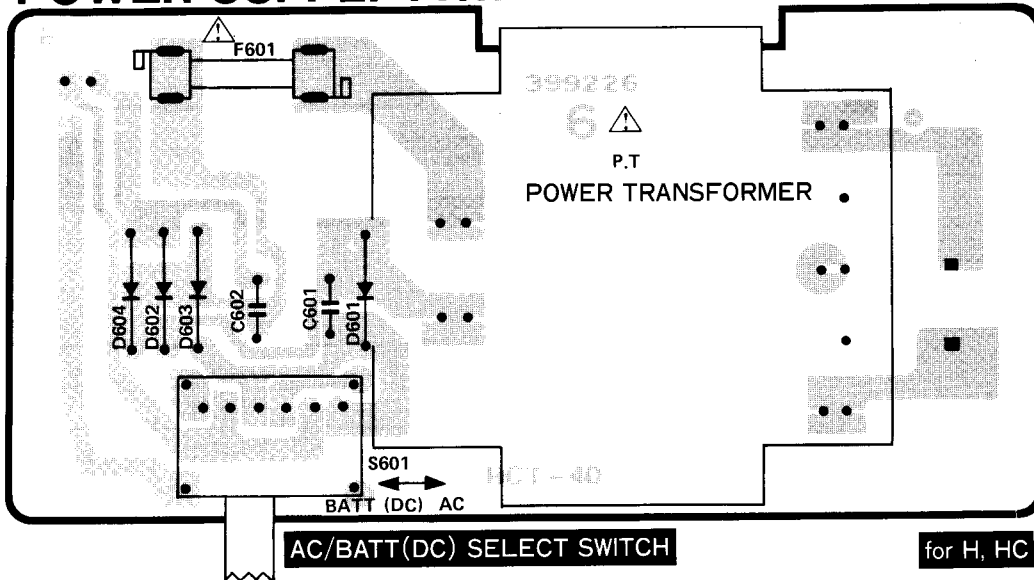
POWER SUPPLY P.W.B.

for W, W(UN)



POWER SUPPLY P.W.B.

for H, HC



A
B
C
D
E
F
G
H
I

T202 FM S-Curve ADJ.

T101 FM IF ADJ.

IC101 TA7358P FM RF OSC. MIX.

MAIN P.W.B. 2/2

SIGNAL CURRENT

MAIN P.W.B. 2/2

SIGNAL CURRENT
⇒: for RADIO
(): MW

IC101 TA7358P FM RF OSC. MIX.

ROD. ANTENNA

T202 FM S-Curve ADJ.

T101 FM IF ADJ.
T201, T203 AM IF ADJ.

IC201 TA7640AP FM-AM IF/AM OSC. MIX.

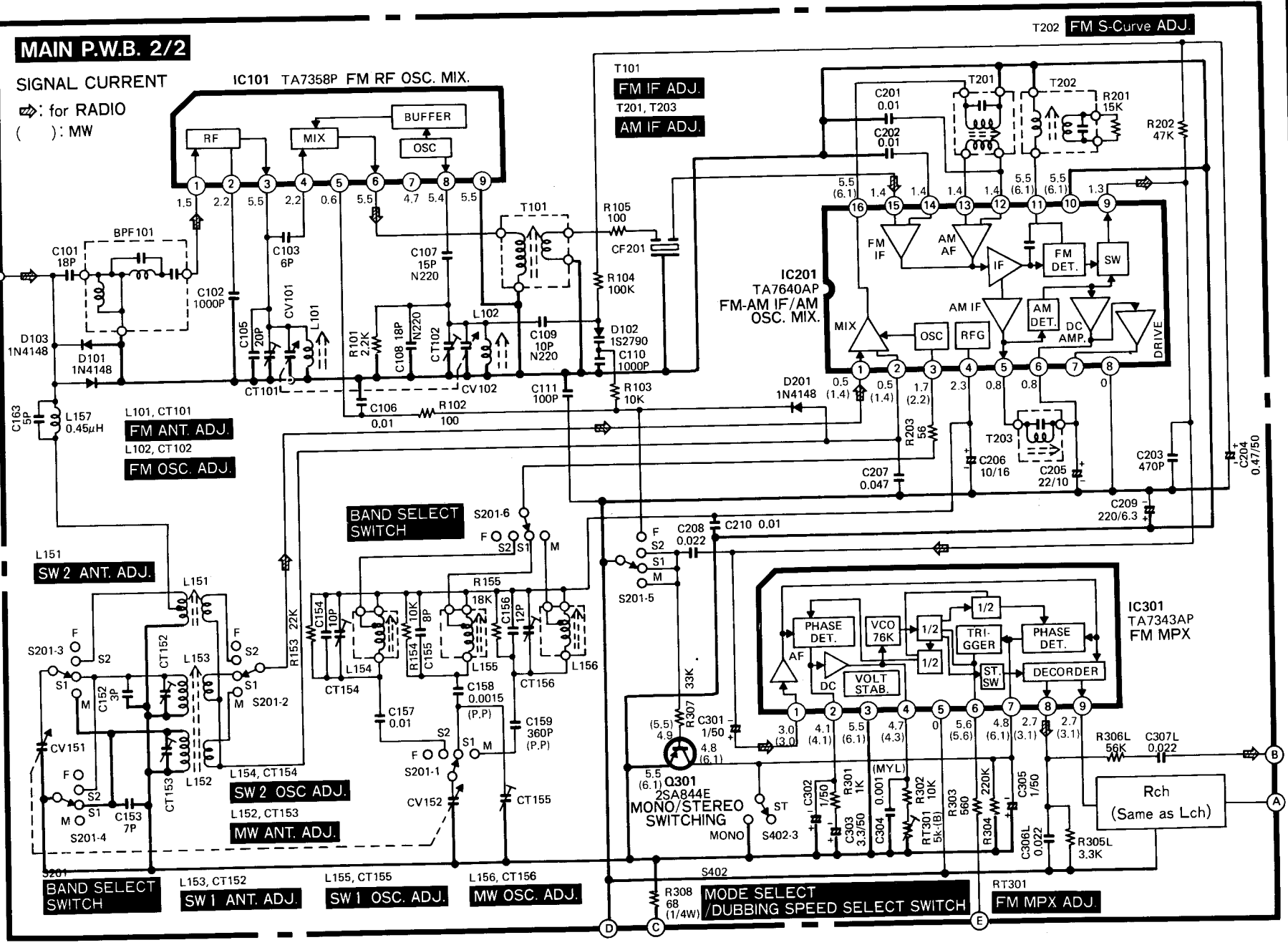
IC301 TA7343AP FM MPX

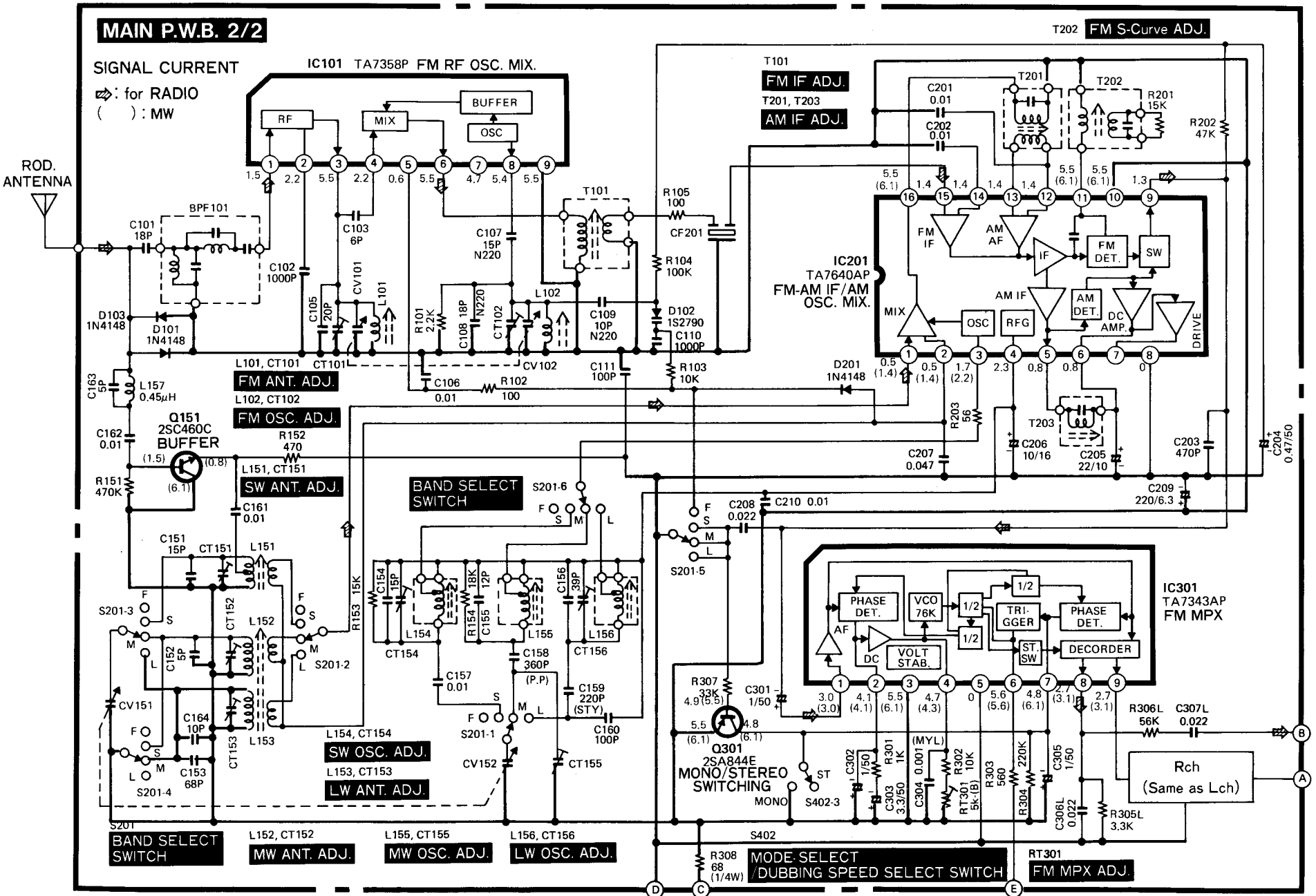
Q301 2SA844E MONO/STEREO SWITCHING

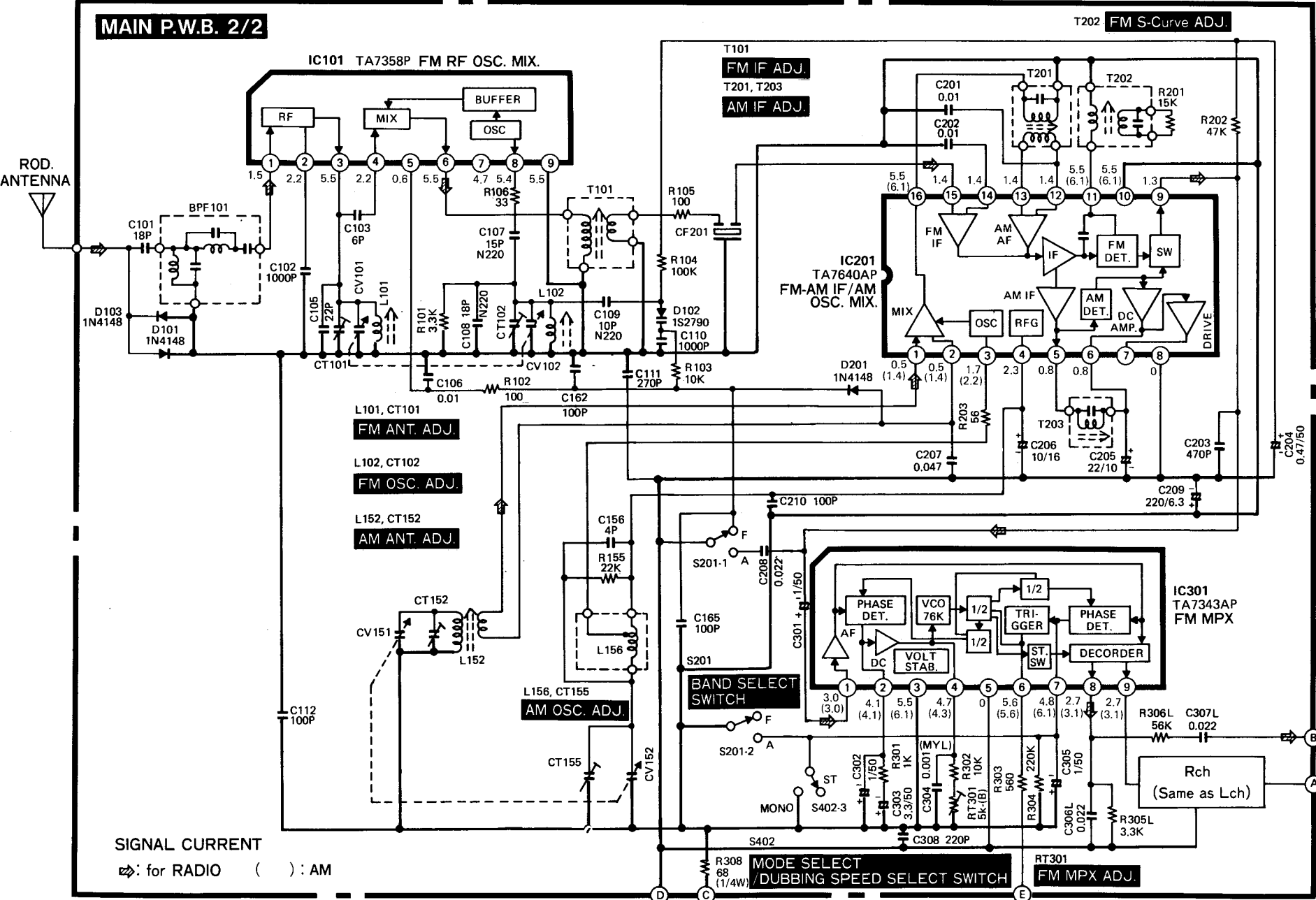
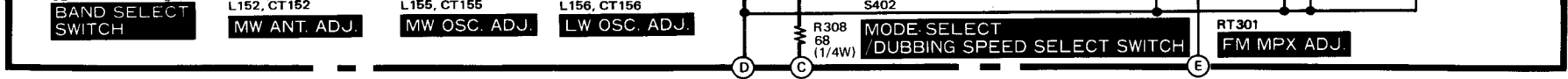
Rch (Same as Lch)

MODE SELECT / DUBBING SPEED SELECT SWITCH

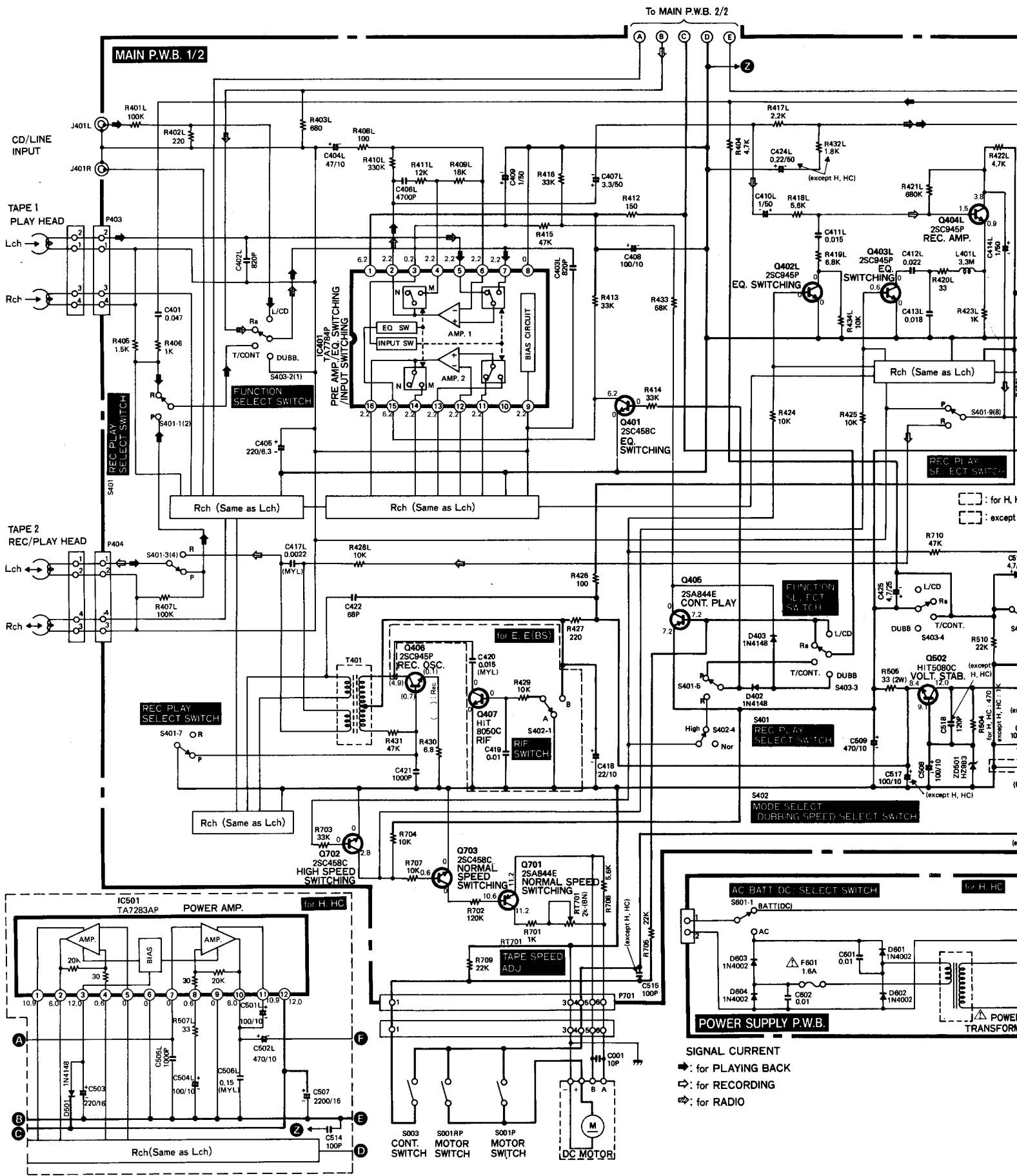
FM MPX ADJ.

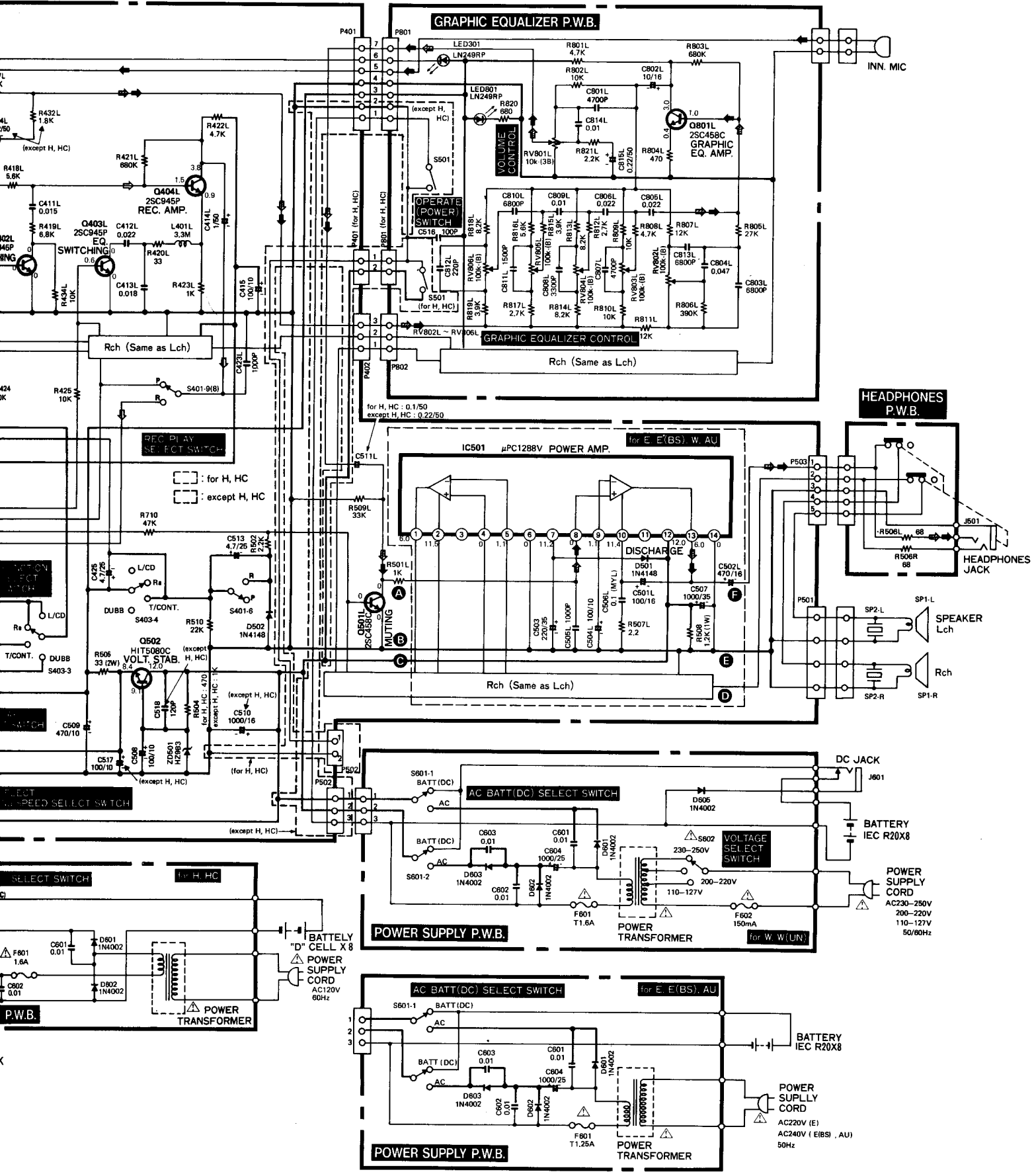


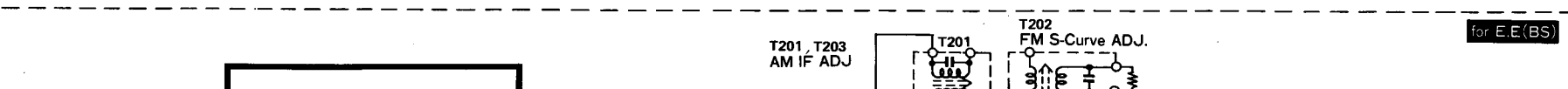
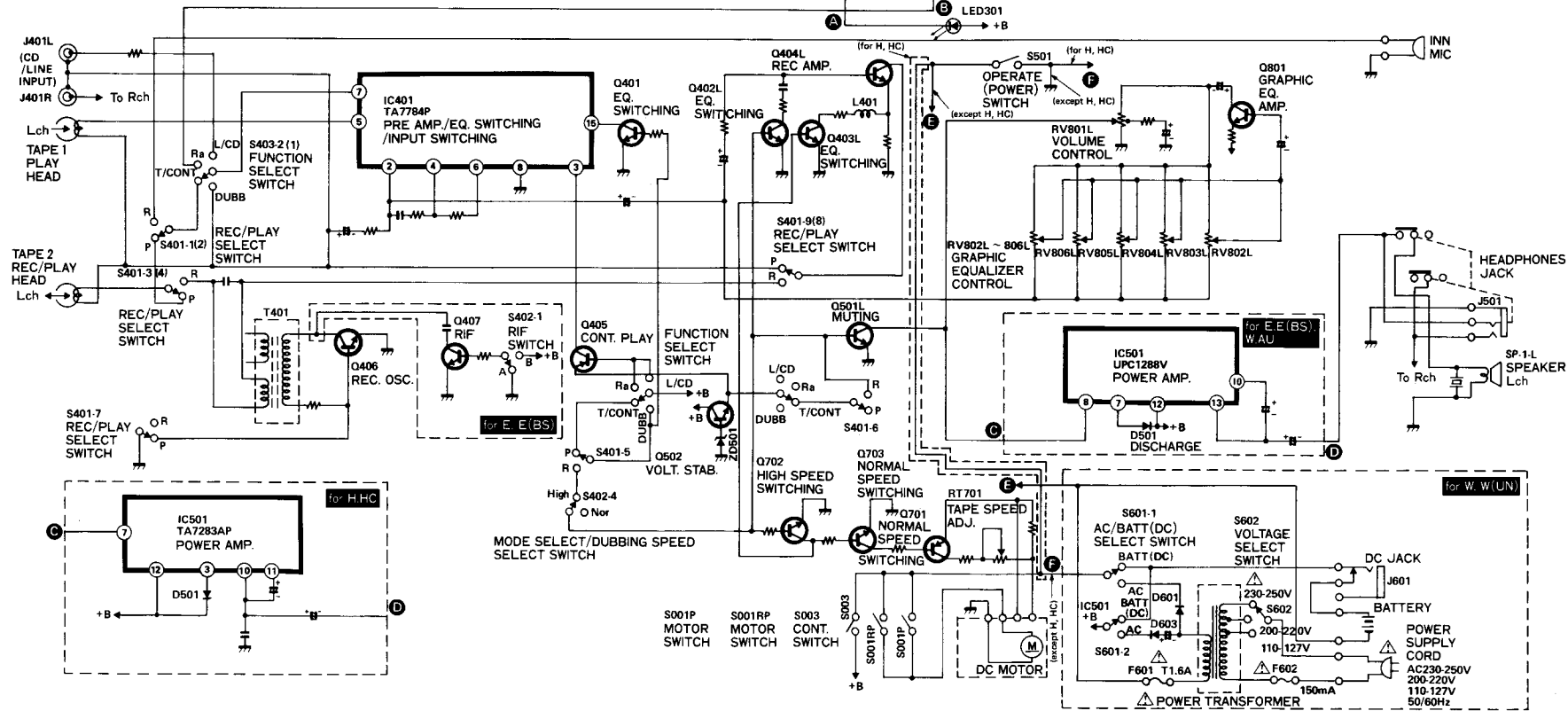
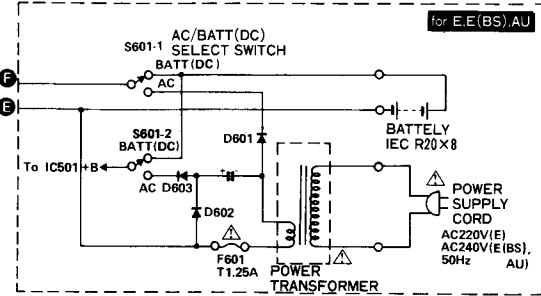
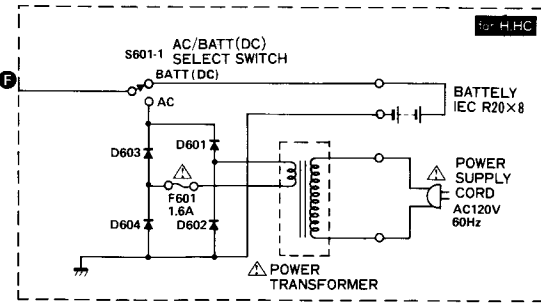
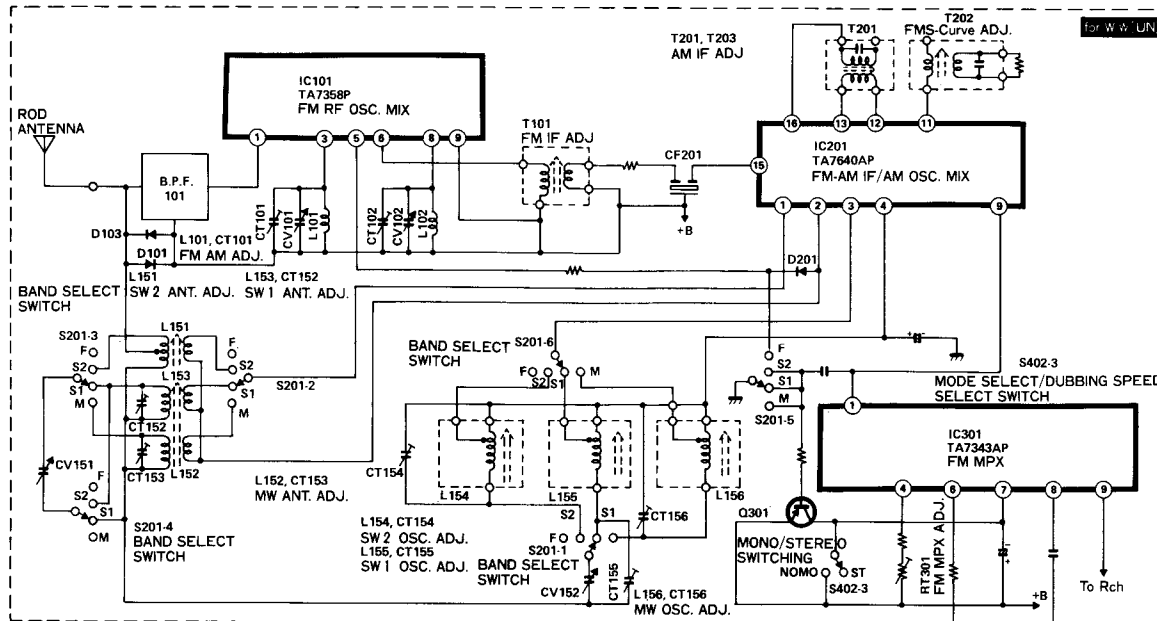




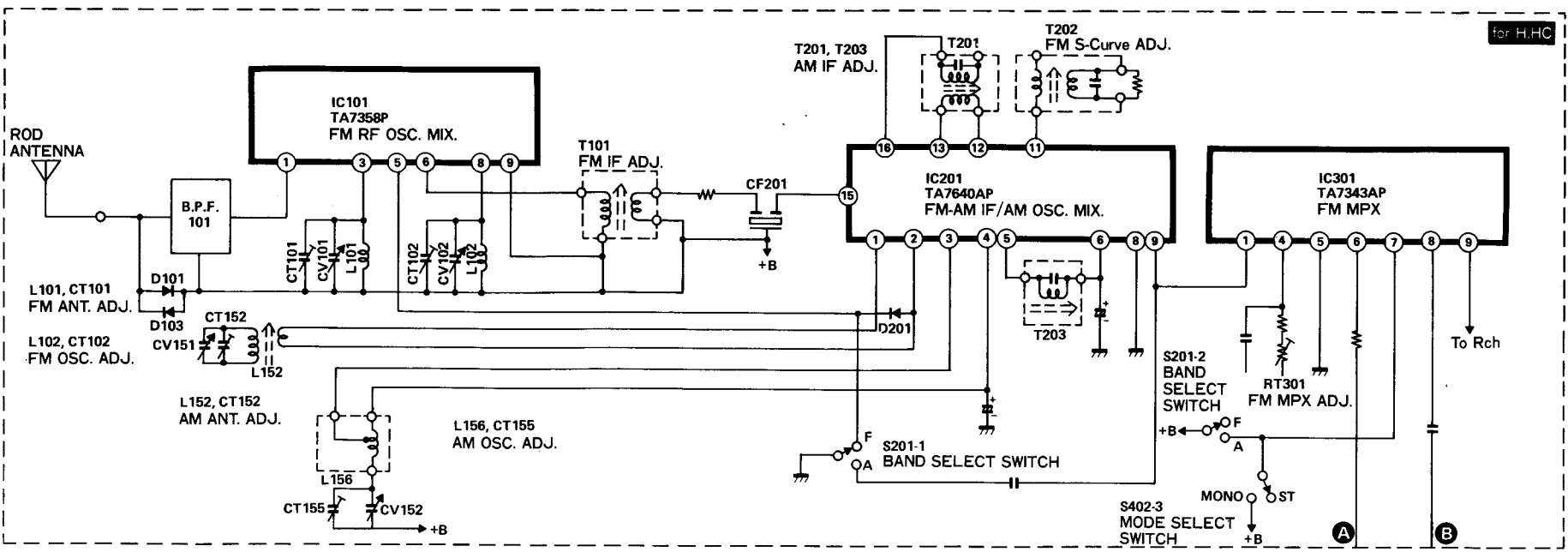
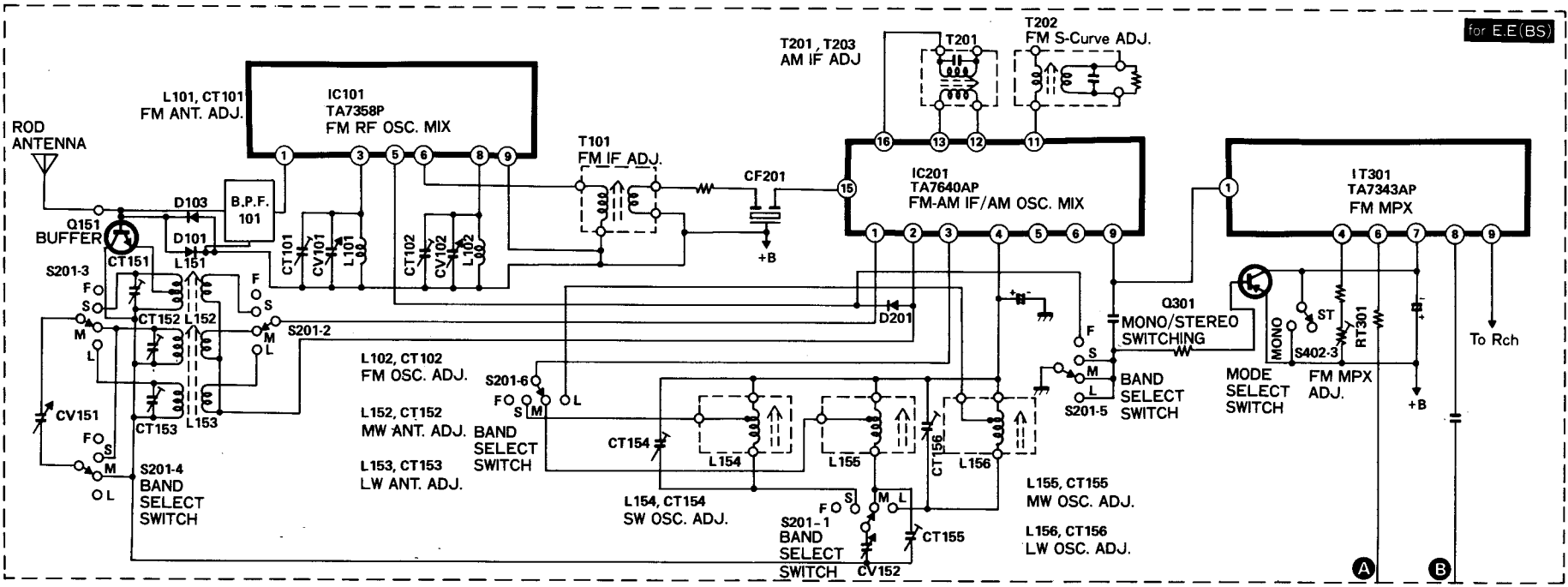
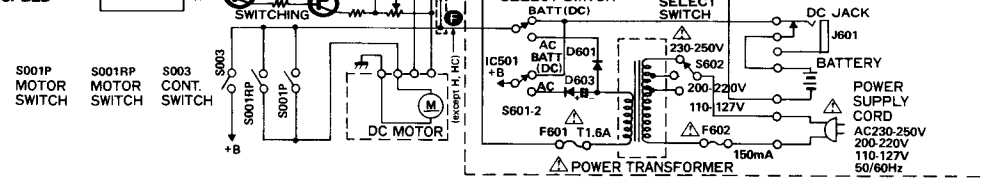
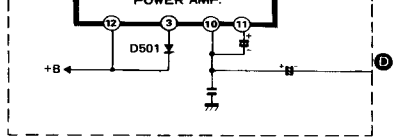
CIRCUIT DIAGRAM (— : + B)



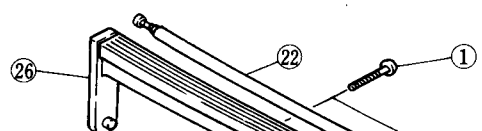
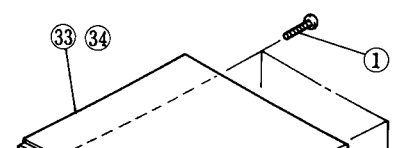
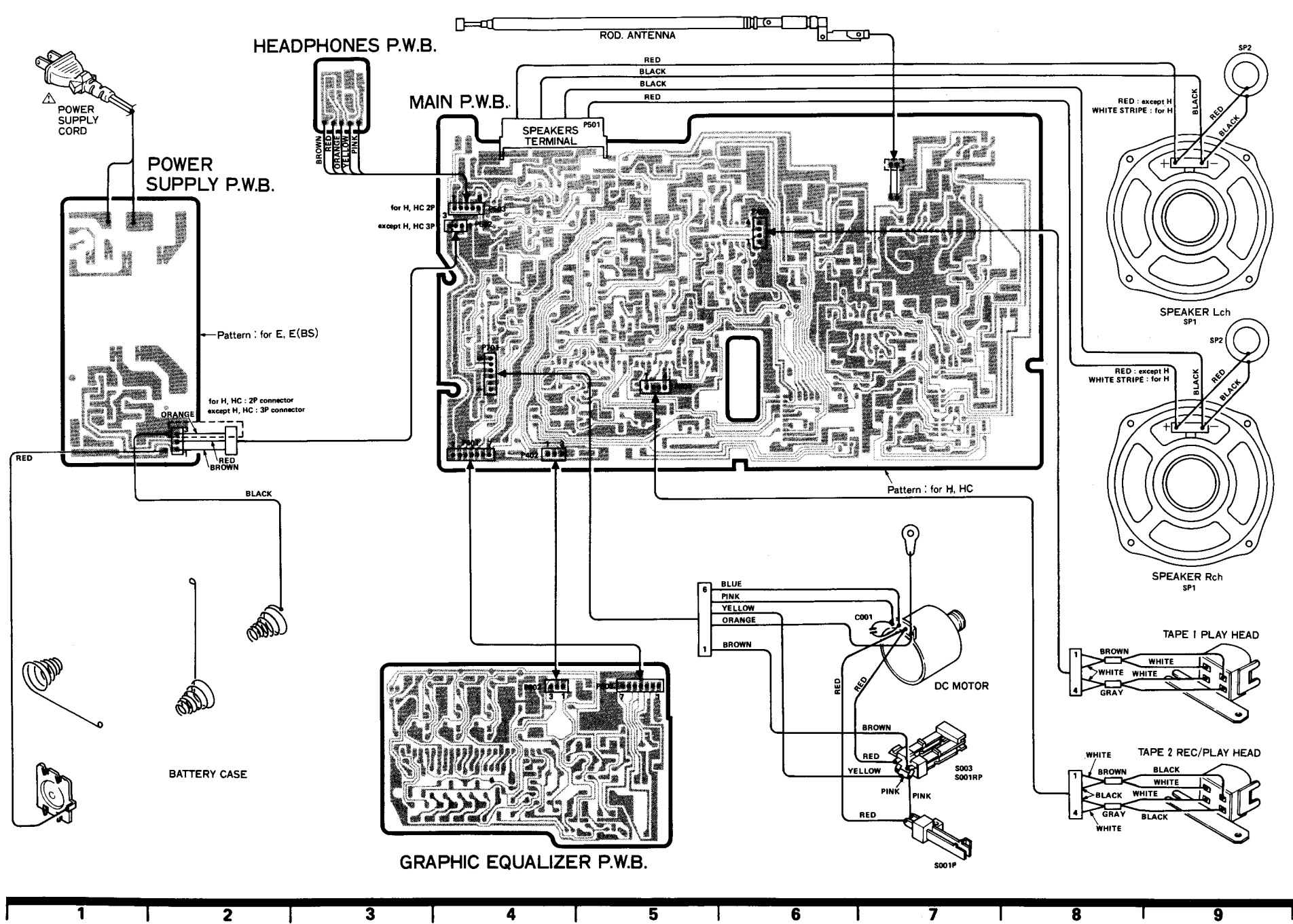




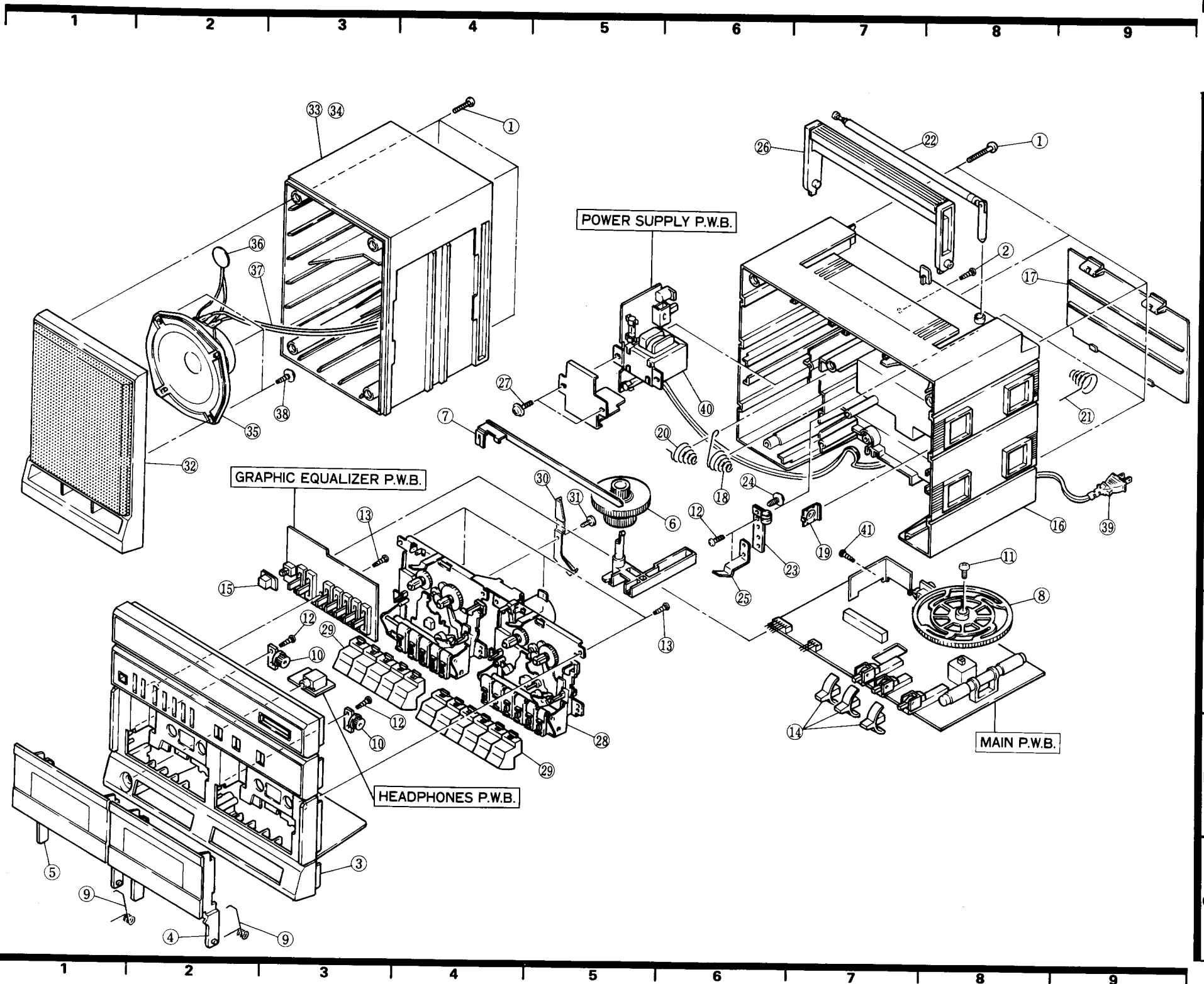
BLOCK DIAGRAM [for E, E(BS), H, HC]



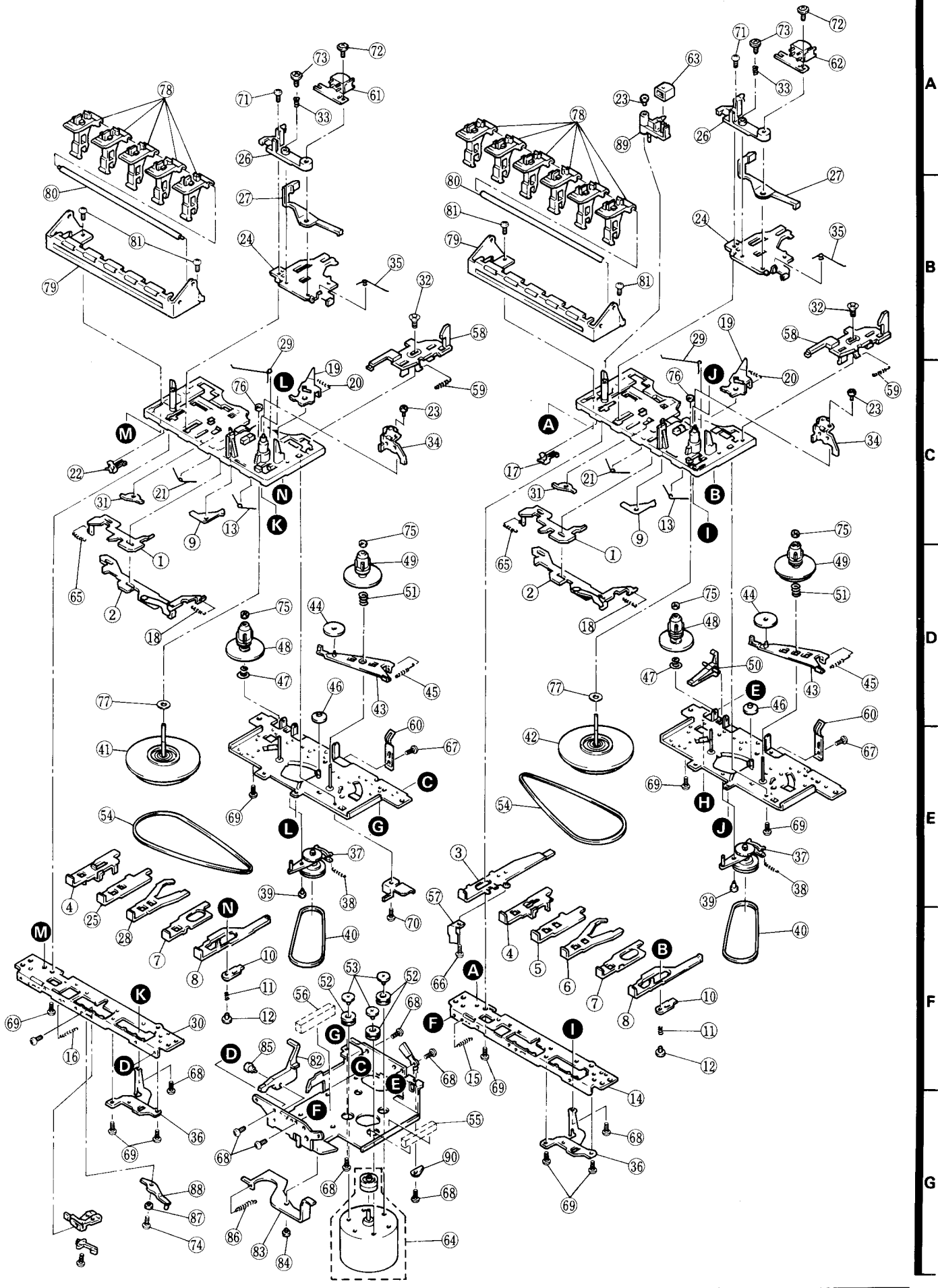
A
B
C
D
E
F
G



1 2 3 4 5 6 7 8 9



(Cassette Chassis) ● Nos. are reference Nos. of parts list.



REPLACEMENT PARTS LIST

CD : Ceramic discal
EL : Electrolytic
MF : Mylar film
PP : Polypro-pylene

ST : Styrol
CF : Carbon film
MO : Metal oxide

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
CAPACITORS								
C001	02486502	CD 10PF ±0.5PF 50V	C163	0208635	CD 0.01 μF ±80% [for E, E(BS)] 50V	C502LR	02523352	EL 470 μF ±20% 10V [for H, HC]
C101	02086662	CD 18PF ±5% 50V	C164	02086502	CD 5PF ±0.25PF 50V [except H, HC]	C503	02525352	EL 470 μF ±20% 16V [except H, HC]
C102	0209161	CD 1000PF ±20% 50V	C165	02086842	CD 10PF ±0.5PF 50V [for E, E(BS)]	C504LR	02525332	EL 220 μF ±20% 16V [for H, HC]
C103	0208646	CD 6PF ±0.5PF 50V	C201	02441712	CD 100PF ±5% 50V [for H, HC]	C505LR	02091612	EL 220 μF ±20% 35V [except H, HC]
C105	02086682	CD 22PF ±5% 50V	C202	02441712	CD 0.01 μF ±80% [except H, HC] 50V	C506LR	0276012	CD 1000PF ±20% 50V [for H, HC]
C106	02441712	CD 20PF ±5% 50V	C203	02097232	CD 470PF ±10% 50V		02760112	MF 0.15 μF ±10% 50V [for H, HC]
C107	0208034	CD 0.01 μF ±80% ±5% 50V	C204	02528052	EL 0.47 μF ±20% 50V	C507	0252542	MF 0.1 μF ±10% 50V [except H, HC]
C108	0208036	CD 18PF ±5% 50V	C205	02523222	EL 22 μF ±20% 10V		0252542	EL 2200 μF ±20% 16V [for H, HC]
C109	0208020	CD 10PF ±0.5PF 50V	C206	0252521	EL 10 μF ±20% 16V	C508	02523312	EL 100 μF ±20% 10V
C110	0209161	CD 1000PF ±20% 50V	C207	02441752	CD 0.047 μF ±80% ±20% 50V	C509	02523352	EL 470 μF ±20% 10V
C111	0208694	CD 270PF ±5% 50V [for H, HC]	C208	02441732	CD 0.022 μF ±80% ±20% 50V	C510	0252541	EL 1000 μF ±20% 16V [except H, HC]
C112	02086842	CD 100PF ±5% 50V [except H, HC]	C209	02522322	EL 220 μF ±20% 6.3V	C511LR	0252801	EL 0.1 μF ±20% 50V [for H, HC]
C151	0208664	CD 15PF ±5% 50V [for E, E(BS)]	C210	0248684	CD 100PF ±5% 50V [for H, HC]		0252802	EL 0.22 μF ±20% 50V [except H, HC]
C152	0208635	CD 5PF ±0.25PF 50V [for E, E(BS)]	C301	02528112	EL 1 μF ±20% 50V	C513	02526152	EL 4.7 μF ±20% 25V
C153	0208633	CD 3PF ±0.25PF 50V [for W, AU, W(UN)]	C302	02528112	EL 1 μF ±20% 50V	C514	02086842	CD 100PF ±5% 50V [for H, HC]
C154	02086802	CD 68PF ±5% 50V [for E, E(BS)]	C303	02528132	EL 3.3 μF ±20% 50V	C515	02086842	CD 100PF ±5% 50V [except H, HC]
C155	02086472	CD 7PF ±0.5PF 50V [for W, AU, W(UN)]	C304	02684462	MF 0.001 μF ±5% 100V	C516	02086842	CD 100PF ±5% 50V
C156	0208664	CD 15PF ±5% 50V [for E, E(BS)]	C305	02528112	EL 1 μF ±20% 50V	C517	02523312	EL 100 μF ±20% 10V [except H, HC]
C157	02086502	CD 10PF ±0.5PF 50V [for W, AU, W(UN)]	C306LR	02441732	CD 0.022 μF ±80% ±20% 50V	C518	02086862	CD 120PF ±5% 50V [except H, HC]
C158	0208662	CD 12PF ±5% 50V [for E, E(BS)]	C307LR	02097632	CD 0.022 μF ±20% 25V	C601	02441712	CD 0.01 μF ±80% 50V
C159	0208662	CD 12PF ±5% 50V [for W, AU, W(UN)]	C308	0208692	CD 220PF ±10% 50V [for H, HC]	C602	02441712	CD 0.01 μF ±80% 50V
C160	0208662	CD 12PF ±5% 50V [for W, AU, W(UN)]	C401	02441752	CD 0.047 μF ±80% ±20% 50V	C603	02441712	CD 0.01 μF ±80% 50V [except H, HC]
C161	02441712	CD 0.01 μF ±80% ±20% 50V	C402LR	02097262	CD 820PF ±10% 50V	C604	02526362	EL 1000 μF ±20% 25V [except H, HC]
C162	02086842	CD 100PF ±5% 50V [for H, HC]	C403LR	02097262	CD 820PF ±10% 50V	C801LR	02097352	CD 4700PF ±10% 50V
			C404LR	02523252	EL 47 μF ±20% 10V	C802LR	0252521	EL 10 μF ±20% 16V
			C405	02522322	EL 220 μF ±20% 6.3V	C803LR	0240210	CD 6800PF ±10% 25V
			C406LR	02097352	CD 4700PF ±10% 50V	C804LR	0209765	CD 0.047 μF ±20% 25V
			C407LR	02528132	EL 3.3 μF ±20% 50V	C805LR	02097632	CD 0.022 μF ±20% 25V
			C408	02523312	EL 100 μF ±20% 10V	C806LR	02097632	CD 0.022 μF ±20% 25V
			C409	02528112	EL 1 μF ±20% 50V	C807LR	02097352	CD 4700PF ±10% 50V
			C410LR	02528112	EL 1 μF ±20% 50V	C808LR	02097342	CD 3300PF ±10% 50V
			C411LR	02097622	CD 0.015 μF ±20% 25V	C809LR	02097612	CD 0.01 μF ±20% 25V
			C412LR	02097632	CD 0.022 μF ±20% 25V	C810LR	0240210	CD 6800PF ±10% 25V
			C413LR	0240215	CD 0.018 μF ±10% 25V	C811LR	02097322	CD 1500PF ±10% 50V
			C414LR	02528112	EL 1 μF ±20% 50V	C812LR	02086922	CD 220PF ±5% 50V
			C415	02523312	EL 100 μF ±20% 10V	C813LR	0240210	CD 6800PF ±10% 25V
			C417LR	02740132	MF 0.0022 μF ±10% 50V	C814LR	02097612	CD 0.01 μF ±20% 25V
			C418	02523222	EL 22 μF ±20% 10V	C815LR	0252802	EL 0.22 μF ±20% 50V
			C419	02441712	CD 0.01 μF ±80% ±20% 50V			
			C420	02750122	MF 0.015 μF ±10% 50V [for E, E(BS)]			
			C421	02097312	CD 1000PF ±10% 50V [for E, E(BS)]			
			C422	02086802	CD 68PF ±5% 50V			
			C423LR	02091612	CD 1000PF ±80% ±20% 50V			
			C424LR	0252802	EL 0.22 μF ±20% 50V [except H, HC]			
			C425	02526152	EL 4.7 μF ±20% 25V			
			C501LR	0252331	EL 100 μF ±20% 10V [for H, HC]			
				02525312	EL 100 μF ±20% 16V [except H, HC]			

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
RESISTORS			RESISTORS			ICs & TRANSISTORS		
R101	0113627	CF 3.3K Ω \pm 5% SRD1/6P [for H, HC]	R422LR	0113631	CF 4.7K Ω \pm 5% SRD1/6P	IC101	2398201	TA7358P
	0113623	CF 2.2K Ω \pm 5% SRD1/6P [except H, HC]	R423LR	0113615	CF 1K Ω \pm 5% SRD1/6P	IC201	2389511	TA7640AP
R102	0113591	CF 100 Ω \pm 5% SRD1/6P	R424	0113639	CF 10K Ω \pm 5% SRD1/6P	IC301	2301041	TA7343AP
R103	0113639	CF 10K Ω \pm 5% SRD1/6P	R425	0113639	CF 10K Ω \pm 5% SRD1/6P	IC401	2301191	TA7784P
R104	0113663	CF 100K Ω \pm 5% SRD1/6P	R426	0113591	CF 100 Ω \pm 5% SRD1/6P	IC501	2301181	TA7283AP
R105	0113591	CF 100 Ω \pm 5% SRD1/6P	R427	0113599	CF 220 Ω \pm 5% SRD1/6P		2300871	[for H, HC] μ PC1288V [except H, HC]
R106	0129407	CF 33 Ω \pm 5% SRD1/4P [for H, HC]	R428LR	0113639	CF 10K Ω \pm 5% SRD1/6P	Q151	2329323	2SC460C [for E, E(BS)]
R151	0113679	CF 470K Ω \pm 5% SRD1/6P [for E, E(BS)]	R429	0113639	CF 10K Ω \pm 5% SRD1/6P [for E, E(BS)]	Q301	2328083	2SA844E [except H, HC]
R152	0113607	CF 470 Ω \pm 5% SRD1/6P [for E, E(BS)]	R430	0113563	CF 6.8 Ω \pm 5% SRD1/6P	Q401	2328282	2SC458C
R153	0113643	CF 15K Ω \pm 5% SRD1/6P [for E, E(BS)]	R431	0113655	CF 47K Ω \pm 5% SRD1/6P	Q402LR	2329453	2SC945P
	0113647	CF 22K Ω \pm 5% SRD1/6P [for W, AU, W(UN)]	R432LR	0113621	CF 1.8K Ω \pm 5% SRD1/6P [except H, HC]	Q403LR	2329453	2SC945P
R154	0113645	CF 18K Ω \pm 5% SRD1/6P [for E, E(BS)]	R433	0113659	CF 68K Ω \pm 5% SRD1/6P	Q404LR	2329453	2SC945P
	0113639	CF 10K Ω \pm 5% SRD1/6P [for W, AU, W(UN)]	R434LR	0113639	CF 10K Ω \pm 5% SRD1/6P	Q405	2328083	2SA844E
R155	0113647	CF 22K Ω \pm 5% SRD1/6P [for H, HC]	R501LR	0113615	CF 1K Ω \pm 5% SRD1/6P	Q406	2329453	2SC945P
	0113645	CF 18K Ω \pm 5% SRD1/6P [for W, AU, W(UN)]	R502	0113623	CF 2.2K Ω \pm 5% SRD1/6P	Q407	2319052	HIT8050C [for E, E(BS)]
R201	0113643	CF 15K Ω \pm 5% SRD1/6P	R504	0113607	CF 470 Ω \pm 5% SRD1/6P [for H, HC]	Q501LR	2328282	2SC458C
R202	0113655	CF 47K Ω \pm 5% SRD1/6P		0113615	CF 1K Ω \pm 5% SRD1/6P [except H, HC]	Q502	2318052	HIT8050C
R203	0113585	CF 56 Ω \pm 5% SRD1/6P	R505	11195072	MO 33 Ω \pm 10% RS2B	Q701	2328083	2SA844E
R301	0113615	CF 1K Ω \pm 5% SRD1/6P	R506LR	0113587	CF 68 Ω \pm 5% SRD1/6P	Q702	2328282	2SC458C
R302	0113639	CF 10K Ω \pm 5% SRD1/6P	R507LR	0113579	CF 33 Ω \pm 5% SRD1/6P [for H, HC]	Q703	2328282	2SC458C
R303	0113609	CF 560 Ω \pm 5% SRD1/6P		0113551	CF 2.2 Ω \pm 5% SRD1/6P [except H, HC]	Q801LR	2328282	2SC458C
R304	0113671	CF 220K Ω \pm 5% SRD1/6P	R508	01111552	MO 1.2K Ω \pm 5% RS1B [except H, HC]	DIODES		
R305LR	0113627	CF 3.3K Ω \pm 5% SRD1/6P	R509LR	0113651	CF 33K Ω \pm 5% SRD1/6P	D101	2398082	1N4148
R306LR	0113657	CF 56K Ω \pm 5% SRD1/6P	R510	0113647	CF 22K Ω \pm 5% SRD1/6P	D102	2338031	1S2790
R307	0113651	CF 33K Ω \pm 5% SRD1/6P [except H, HC]	R701	0113615	CF 1K Ω \pm 5% SRD1/6P	D103	2398082	1N4148
R308	0129551	CF 68 Ω \pm 5% SRD1/4P	R702	0113665	CF 120K Ω \pm 5% SRD1/6P	D201	2398082	1N4148
R401LR	0113663	CF 100K Ω \pm 5% SRD1/6P	R703	0113651	CF 33K Ω \pm 5% SRD1/6P	D402	2398082	1N4148
R402LR	0113599	CF 220 Ω \pm 5% SRD1/6P	R704	0113639	CF 10K Ω \pm 5% SRD1/6P	D403	2398082	1N4148
R403LR	0113611	CF 680 Ω \pm 5% SRD1/6P	R705	0113647	CF 22K Ω \pm 5% SRD1/6P	D501	2398082	1N4148
R404	0113631	CF 4.7K Ω \pm 5% SRD1/6P	R707	0113639	CF 10K Ω \pm 5% SRD1/6P	D502	2398082	1N4148
R405	0113619	CF 1.5K Ω \pm 5% SRD1/6P	R708	0113633	CF 5.6K Ω \pm 5% SRD1/6P	D601	2398061	1N4002
R406	0113615	CF 1K Ω \pm 5% SRD1/6P	R709	0113647	CF 22K Ω \pm 5% SRD1/6P	D602	2398061	1N4002
R407LR	0113663	CF 100K Ω \pm 5% SRD1/6P	R710	0113655	CF 47K Ω \pm 5% SRD1/6P	D603	2398061	1N4002
R408LR	0113591	CF 100 Ω \pm 5% SRD1/6P	R801LR	0113631	CF 4.7K Ω \pm 5% SRD1/6P	D604	2398061	1N4002 [for H, HC]
R409LR	0113645	CF 18K Ω \pm 5% SRD1/6P	R802LR	0113639	CF 10K Ω \pm 5% SRD1/6P	D605	2398061	1N4002 [for W, W(UN)]
R410LR	0113675	CF 330K Ω \pm 5% SRD1/6P	R803LR	0113683	CF 680K Ω \pm 5% SRD1/6P	ZD501	2338966	HZ9B3
R411LR	0113641	CF 12K Ω \pm 5% SRD1/6P	R804LR	0113607	CF 470 Ω \pm 5% SRD1/6P	LED301	2398511	LN249RP
R412	0113595	CF 150 Ω \pm 5% SRD1/6P	R805LR	0113649	CF 27K Ω \pm 5% SRD1/6P	LED801	2398511	LN249RP
R413	0113651	CF 33K Ω \pm 5% SRD1/6P	R806LR	0113677	CF 390K Ω \pm 5% SRD1/6P	VARIABLE RESISTORS		
R414	0113651	CF 33K Ω \pm 5% SRD1/6P	R807LR	0113641	CF 12K Ω \pm 5% SRD1/6P	RT301	0199915	5k Ω -(B) (FM MPX ADJ.)
R415	0113655	CF 47K Ω \pm 5% SRD1/6P	R808LR	0113631	CF 4.7K Ω \pm 5% SRD1/6P	RT701	0158923	2k Ω -(BN) (TAPE SPEED ADJ.)
R416	0113651	CF 33K Ω \pm 5% SRD1/6P	R809LR	0113639	CF 10K Ω \pm 5% SRD1/6P	RV801LR	0189412	10k Ω -(3B) (VOLUME CONTROL)
R417LR	0113623	CF 2.2K Ω \pm 5% SRD1/6P	R810LR	0113639	CF 10K Ω \pm 5% SRD1/6P	RV802LR	0189411	100k Ω -(B) (G/E CONTROL)
R418LR	0113633	CF 5.6K Ω \pm 5% SRD1/6P	R811LR	0113641	CF 12K Ω \pm 5% SRD1/6P	RV803LR	0189411	100k Ω -(B) (G/E CONTROL)
R419LR	0113635	CF 6.8K Ω \pm 5% SRD1/6P	R812LR	0113625	CF 2.7K Ω \pm 5% SRD1/6P	RV804LR	0189411	100k Ω -(B) (G/E CONTROL)
R420LR	0113579	CF 33 Ω \pm 5% SRD1/6P	R813LR	0113637	CF 8.2K Ω \pm 5% SRD1/6P	RV805LR	0189411	100k Ω -(B) (G/E CONTROL)
R421LR	0113683	CF 680K Ω \pm 5% SRD1/6P	R814LR	0113637	CF 8.2K Ω \pm 5% SRD1/6P	RV806LR	0189411	100k Ω -(B) (G/E CONTROL)

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
COILS & TRANSFORMERS			CF201	02835572	Semi variable capacitor (CT154, CT156) [except H, HC]	16	4042272	Rear case ass'y [for HC]
L101	2137682	FM OSC coil	△F601	2728005	Fuse 1.6A [for H, HC]		4042273	Rear case ass'y [for E]
L102	2135274	FM OSC coil	△	2727192	Fuse T1.25A [for E, AU]		4042274	Rear case ass'y [for E(BS)]
L151	2137662	SW ANT coil [for E, E(BS)]	△	2727743	Fuse T1.25A [for E(BS)]		4042275	Rear case ass'y [for W]
	2137667	Antenna coil [for W, AU, W(UN)]	△	2727194	Fuse T1.6A [for W, W(UN)]		4042276	Rear case ass'y [for AU]
L152	2758223	Ferrite antenna [for H, HC]	△F602	2727905	Fuse 150mA [for W, W(UN)]		4042277	Rear case ass'y [for W(UN)]
	2757992	Ferrite antenna [for E, E(BS)]	S201	2628486	Lever switch (BAND SELECT) [for H, HC]	17	3804261	Battery cover
	2757981	Ferrite antenna [for W, AU, W(UN)]		2628483	Lever switch (BAND SELECT) [except H, HC]	18	3367062	Spring
L153	2757992	Ferrite antenna [for E, E(BS)]	S401	2629294	Slide switch (REC/PLAY SELECT)	19	4436666	Terminal
	2757981	Ferrite antenna [for W, AU, W(UN)]	S402	2628485	Lever switch (MODE SELECT/ RIF/DUBBING SPEED SELECT)	20	3367142	Spring A
L154	2137671	SW OSC coil [for E, E(BS)]	S403	2628482	Lever switch (FUNCTION SELECT)	21	3391601	Battery spring
	2137672	SW OSC coil [for W, AU, W(UN)]				22	2758012	Rod antenna
L155	2137711	MW OSC coil [for E, E(BS)]	△S501	2600471	Push switch [OPERATE (POWER)]	23	4474371	Antenna holder
	2137713	SW OSC coil [for W, AU, W(UN)]	S601	2628671	Slide switch (AC/BATT(DC) SELECT)	24	4592528	3 φ x 8 flange head screw (antenna holder)
L156	2137662	Antenna coil [for H, HC]	△S602	2618472	Switch (VOLTAGE SELECT) [for W, W(UN)]	25	4474381	Antenna spring
	2137712	LW OSC coil [for E, E(BS)]	P501	2689551	4P push terminal	26	3976641	Handle
	2137711	MW OSC coil [for W, AU, W(UN)]		2689461	2P terminal [except H, HC]			
L157	2137684	Choke coil [except H, HC]	CABINET			27	4578976	3 φ x 20 BT bind head screw (power transformer)
L401LR	2227991	Choke coil	1	4577816	3 φ x 20 BT screw (rear case, speaker box)	28	2589101	TN-21 mechanism ass'y
T101	2154962	FM IF transformer	2	86994082	3 φ x 8 BT bind head screw (rear case)	29	3305881	Cassette button
T201	2154952	AM IF transformer	3	4042251	Front case ass'y [for H, HC]	30	4474391	REC lever
T202	2154964	FM IF transformer		4042252	Front case ass'y [for E, E(BS)]	31	4833465	Special screw (REC lever)
T203	2154951	AM IF transformer		4042253	Front case ass'y [for W, AU, W(UN)]	32	4042321	Buffel plate ass'y
T401	2136891	REC OSC transformer	4	3804201	Cassette door (R) (TAPE 2)	33	3804281	Speaker box (R)
			5	3804211	Cassette door (L) (TAPE 1)	34	3804291	Speaker box (L)
			6	4042311	Tuning knob ass'y	35	2403476	Speaker (12 cm)
			7	3804251	Pointer	36	2403351	Tweeter
			8	3804231	Gear	37	2712262	Speaker cord [for H]
			9	3391621	Door spring		2712261	Speaker cord [except H]
			10	3950381	Damper ass'y	38	4578972	3 φ x 10 BT flange screw (speaker)
			11	07413082	2.6 φ x 8 bind screw (gear)	△39	2706593	Power supply cord [for H]
			12	86914102	3 φ x 10 BT bind head screw (damper, antenna holder, antenna spring)	△	2702711	Power supply cord [for HC]
			13	86994102	3 φ x 10 BT bind head screw (cassette chassis, G/E P.W.B.)	△	2712101	Power supply cord [for E]
			14	3308121	Snap knob (FUNCTION, MODE, BAND)	△	2749582	Power supply cord [for E(BS)]
			15	3308131	Button [OPERATE(POWER)]	△	2706584	Power supply cord [for W, W(UN)]
			16	4042271	Rear case ass'y [for H]	△	2749622	Power supply cord [for AU]
						△40	2249711	Power transformer [for H, HC]
						△	2249712	Power transformer [for E]
						△	2249713	Power transformer [for E(BS), AU]
						△	2249714	Power transformer [for W, W(UN)]
						41	8691406	3 φ x 6 BT bind head screw (IC501) [for H, HC]
MISCELLANEOUS								
J401LR	2678152	2P pin jack						
J501	2678761	Stereo jack						
J601	2678282	DC jack [for W, W(UN)]						
	2737441	Mic. jack						
BPF101	2137191	FM band pass filter						
CF201	2135321	Ceramic filter						
	0282311	Variable capacitor (CV101, CV102, CV151, CV152) (CT101, CT102, CT152, CT155) [for H, HC]						
	0282341	Variable capacitor (CV101, CV102, CV151, CV152) (CT101, CT102, CT152, CT155) [except H, HC]						
	0283557	Semi variable capacitor (CT151, CT153) [for E, E(BS)]						
	02831132	Variable capacitor (CT153) [for W, AU, W(UN)]						

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
41	86914082	3 ϕ x 8 BT bind head screw (IC501) [except H, HC]	56	4839383	Anti vibration felt mat
			57	4474841	REC spring plate
			58	4819535	Eject slide lever
CASSETTE CHASSIS			59	4819044	Eject slide lever spring
1	4818992	Switch plate	60	4819036	Pack spring
2	4839371	Push button actuator ass'y	61	2557492	P head
3	4823651	REC button lever	62	2557491	R/P head
4	4823661	PLAY button lever	63	2557551	Erase head
5	4823671	RWD button lever	64	4831653	Motor ass'y
6	4823681	FF button lever	65	4820218	Switch actuator spring
7	4823691	STOP button lever	66	4819186	2 ϕ x 3 screw with washer (REC spring plate)
8	4823701	PAUSE button lever	67	4819063	2 ϕ x 3 tapping screw (pack spring)
9	4818990	RWD lever	68	4819068	2 ϕ x 4 tapping screw (motor bracket, metal guide)
10	4833451	PAUSE lever	69	4819607	2 ϕ x 5 bind tapping screw (sub chassis, metal guide)
11	4819132	PAUSE lever spring	70	4819191	2 ϕ x 6 tapping screw (PAUSE protection bracket)
12	4819133	PAUSE stopper	71	4819611	2 ϕ x 6 screw (head base)
13	4819100	Button lever spring	72	4819060	2 ϕ x 7 screw (P head, R/P head)
14	4820215	Sub chassis	73	4819600	Azimuth screw (head base)
15	4819007	Button lever spring	74	4819202	2 ϕ x 4.5 camera screw (RC lever)
16	4820217	PLAY button lever spring	75	4819077	Washer (1.2 ϕ x 3.8 x 0.4)
17	4832091	Leaf switch	76	4819078	Washer (1.55 ϕ x 3.8 x 0.5)
18	4819008	Actuator spring	77	4832432	P washer cut (2.05 ϕ x 4 x 0.5)
19	4819009	Auto lever	78	4831623	Operation lever
20	4819000	Auto lever spring	79	4831624	B frame
21	4820214	Button lever spring	80	4819232	Button lever shaft
22	2789801	Leaf switch	81	4819072	2 ϕ x 7 screw (B frame)
23	4832522	Screw (pinch roller arm)	82	4833463	B lever
24	4820219	Head panel	83	4833464	A lever
25	4832451	RWD button lever	84	4833465	Special screw (A lever)
26	4819014	Head base	85	4833466	Special screw (B lever)
27	4832412	Sensing plate ass'y	86	4833467	Spring
28	4832452	FF button lever	87	4833468	Collar
29	4820221	Head panel spring	88	4839385	RC lever
30	4832482	Sub plate	89	4819018	MG arm
31	4819006	PR stopper	90	4839386	Lug plate
32	4819045	Screw (eject slide lever)	for ACCESSORIES		
33	4819017	Spring	\triangle	2667922	Siemens plug [for W, W(UN)]
34	4839372	Pinch roller arm ass'y			
35	4820223	Pressure roller arm spring			
36	4831610	Metal guide			
37	4839373	RF pulley arm ass'y			
38	4820225	RF pulley arm spring			
39	4835913	RF arm collar screw (RF pulley arm)			
40	4820227	Belt			
41	4839374	Flywheel ass'y			
42	4839375	Flywheel ass'y			
43	4839377	Take up gear plate ass'y			
44	4839378	Take up roller gear			
45	4819020	TG plate spring			
46	4839379	FF gear			
47	4839370	Back tension spring			
48	4819003	Supply reel ass'y			
49	4839381	Take up reel ass'y			
50	4832421	Record safety lever			
51	4839382	Back tension spring			
52	4819039	Motor rubber			
53	4819533	Motor collar screw (motor)			
54	4833457	Belt			
55	4835916	Mat			



HITACHI SALES EUROPA GmbH
Rungedamm 2, 2050 Hamburg 80,
West Germany
Tel. 040-734 11-0

HITACHI SALES (U.K.) Ltd.
Hitachi House, Station Road, Hayes, Middlesex UB3
4DR, England
Tel. 01-848-8787

HITACHI SALES SCANDINAVIA AB
Rissneleden 8, Box 7138, 172-07 Sundbyberg, Sweden
Tel. 08-98 52 80

HITACHI SALES NORWAY A/S
P.O. Box 503, Oerebekk, 1620,
Gressvik, Norway
Tel. 032-28255

SUOMEN HITACHI OY
Takojanokatu 5, 15800 Lahti 80, Finland
Tel. (918) 44 241

HITACHI SALES A/S
Kuldysen 13, DK-2630, Taastrup, Denmark
Tel. 02-999200

HITACHI SALES A.G.
Bahnhofstrasse, 19, 5600 Lenzburg, Switzerland
Tel. 064-513621

HITACHI SALES WARENHANDELS GMBH
A-1180/Wien, Kreuzgasse 27, Austria
Tel. 0222-421670

HITACHI SALES ITALIANA, S.P.A.
Via Cristoforo Colombo 49, Trezzano sul naviglio
(Milano), Italy
Tel. 44 59 031

HITACHI SALES BELGIUM S.A./N.V.
Chaussee de Namur, 56, B-1400 Nivelles, Belgium
Tel. (3267) 21-71-81, (3267) 21-79-81

HITACHI SALES IBERICA, S.A.
Gran Via Carlos Tercero, 101, 1-1, Barcelona-08028,
Spain
Tel. 330-8652

**HITACHI PRODUCTIONS MAROC ELECTRONIQUES
DOMESTIQUES S.A.**
Rue du Havre, Casablanca, Morocco
Tel. 30-73-68, 30-73-57

HITACHI CANARIAS S.A.
Calle San-Francisco No. 19, 38002, Santa Cruz de Tenerife
Canary Islands
Tel. 24-64-98

HITACHI SALES (HELLAS) S.A.
110 Syngrou St., Athens, Greece
Tel. 9219082, 9233469

HITACHI SALES (MALAYSIA) SDN. BHD.
Wisma Hitachi. No. 2. Lorong 13/6A, 46200 Petaling
Jaya, Malaysia
Tel. 7573455

HITACHI (SINGAPORE) PTE., LTD.
18 Pasir Panjang Road # 01-03 PSA
Multi-Storey Complex. Singapore 0511
Tel. 2738102

HITACHI SALES (THAILAND) LTD.
2240-46, New Petchburi Road, Bangkok, Hueykuang
Bangkok, Thailand
Tel. 314-2741

HITACHI ELECTRIC SERVICE CO., (HONG KONG) LTD.
4th Floor Leun Tai Industrial Bldg., 72-76 Kwai Cheong
Road Kwai Chung N.T., Hong Kong
Tel. 0-242976, 0-240126

HITACHI SALES AUSTRALIA PTY LTD.
153 Keys Road, Moorabbin, Victoria 3189 Australia
Tel. 555-8722

HITACHI SALES CORPORATION OF AMERICA
Eastern Regional Office
1290 Wall Street West, Lyndhurst, New Jersey 07071,
U.S.A.
Tel. 201-935-8980

Mid-Western Regional Office
1400 Morse Ave., Elk Grove Village, Illinois 60007, U.S.A.
Tel. 312-593-1550

Southern Regional Office
510 Plaza Drive, College Park, Georgia 30349, U.S.A.
Tel. 404-763-0360

Headquarters Western Regional Office
401 West Artesia Boulevard, Compton, California 90220
U.S.A.
Tel. 213-537-8383

HITACHI SALES CORPORATION OF HAWAII, INC.
3219 Koapaka Street, Honolulu, Hawaii 96819, U.S.A.
Tel. 808-836-3621

HITACHI (HSC) CANADA INC.
3300 Trans-Canada Highway, Pointe Claire, Quebec,
H9R 1B1, Canada
Tel. 514-697-9150

Hitachi Sales Centroamericana, S.A.
HITACHI ELECTRONICA CENTROAMERICANA S.A.
San Rafael de Escazu, (Apartado 10272), San Jose,
Costa Rica
Tel. 28-20-11, 28-00-37

Hitachi Sales Corporation de Panama, S.A.
INTERNATIONAL HITACHI SALES PANAMA, LTD.
PRODUCTOS HITACHI, S.A.
Apartado 7657 Panama City, Rep. of Panama
Tel. 61-3100, 61-4305

HITACHI-FRANCE (RADIO-T.V. ELECTRO-MENAGER) S.A.
95-101 Rue Charles Michels,
93200 SAINT-DENIS,
France
Tel. 4821 6015

HITACHI LTD. TOKYO JAPAN
Head Office: THE HITACHI ATAGO BLDG.
No. 15-12, 2-Chome Nishi-Shinbashi
Minato-ku, Tokyo 105, Japan
Tel. Tokyo (03) 502-2111

TRK-W540 TY No. 541E