

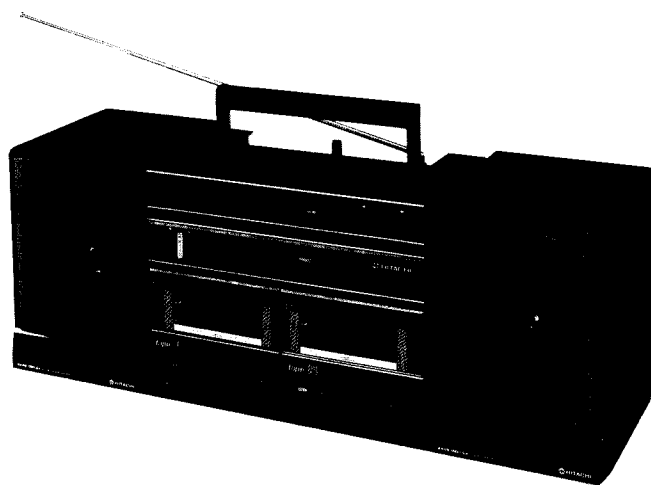
HITACHI SERVICE MANUAL

TY

No. 541E

TRK-W540
[H, HC, E, E(BS), W, AU, W(UN)]

TN-21SW-793 chassis



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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 $\triangle$ 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)]
Tuning Range:	FM/SW2/SW1/MW 4-band Superheterodyne [for W, AU, W(UN)]
	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)

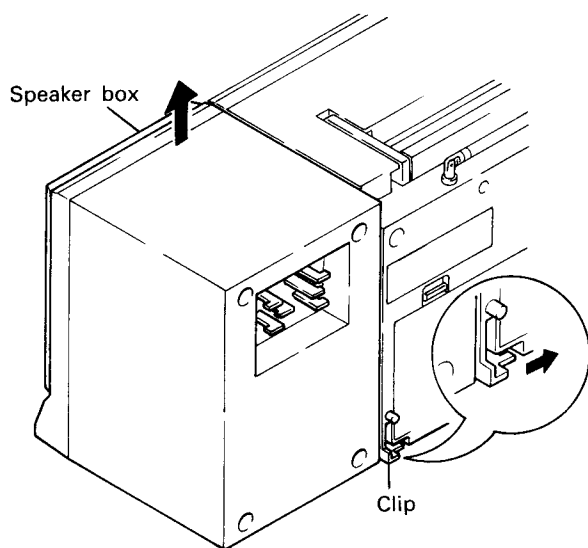


Fig.1

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)

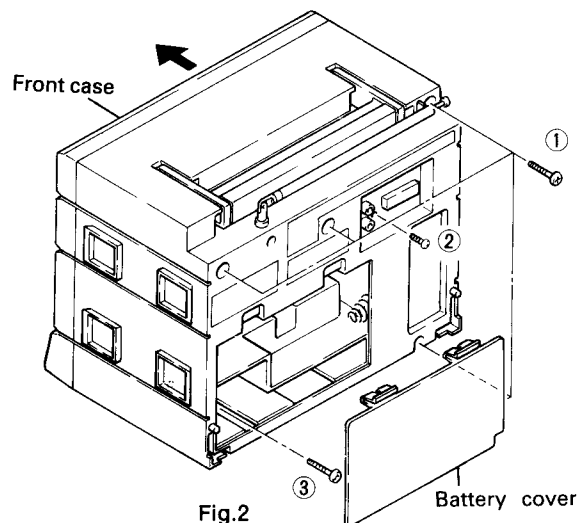


Fig.2

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.

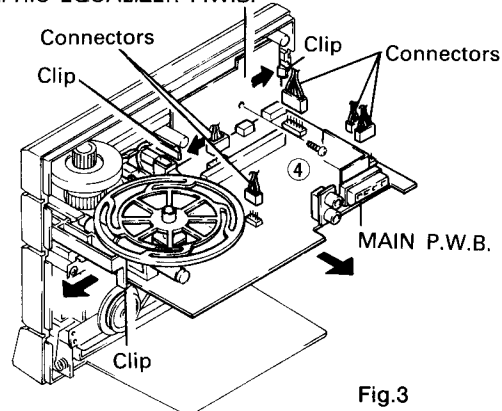


Fig.3

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.

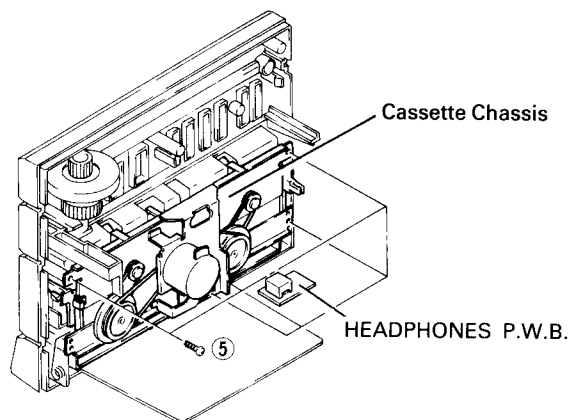


Fig.4

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

Remove two screws ⑥ and one clip.

(Clip is for W, W(UN) only)

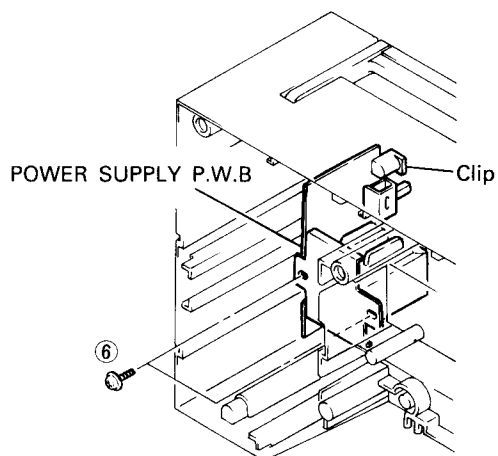


Fig.5

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.

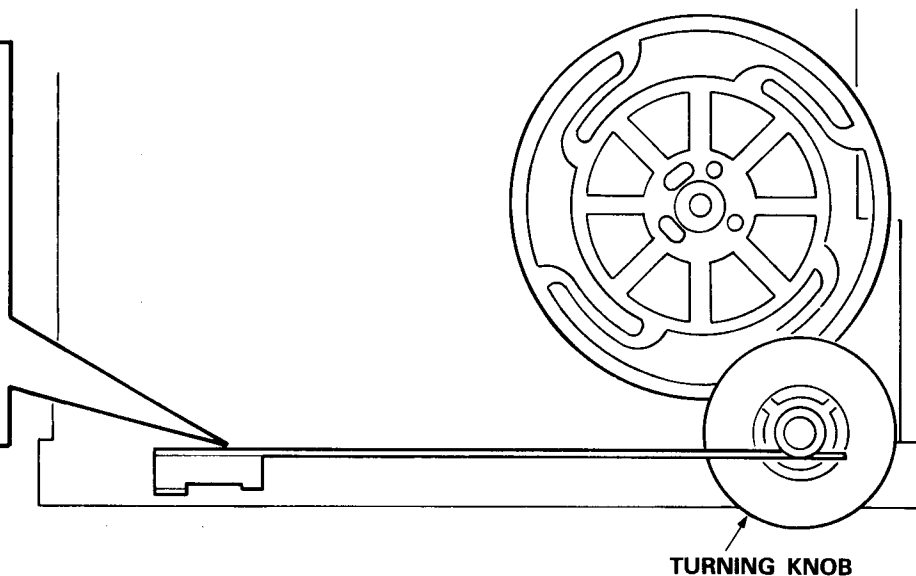
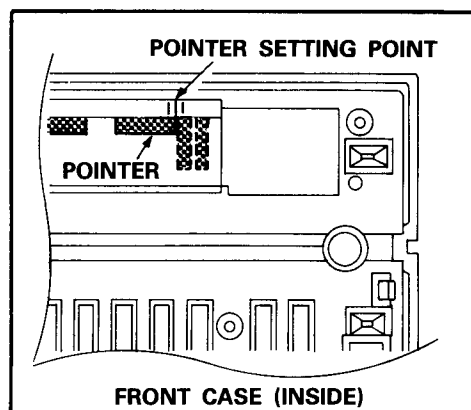


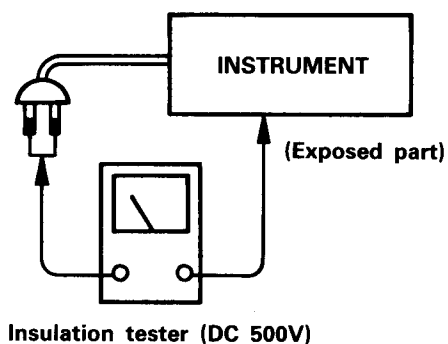
Fig.6

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

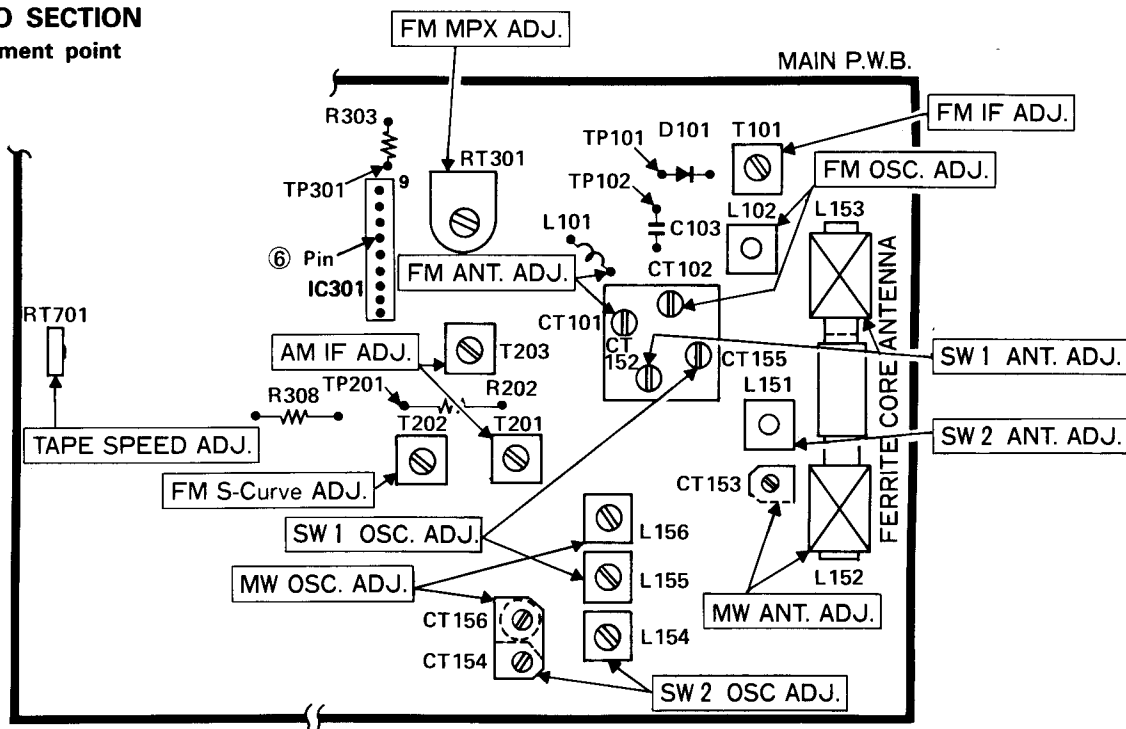


Fig.7

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 Pointer Position	Adjust	Reading
			Mesuring Instrument	Input Terminal	Output Terminal1				
1	(1)	AM IF	● Genescope (455kHz)	Ferrite-core antenna	TP201	455 kHz	Highest	T201 T203	(Note1)
	(2)					Repeat step (1).			
2	(1)	SW2 OSC. (covering)	● AM signal generator (400Hz, 30% mod.)	TP101 (through SW dummy antenna) (Note 2)	Speakers terminal	6.7 MHz	Lowest	L154	Max.
	(2)					23 MHz	Highest	CT154	
	(3)					Repeat steps (1) and (2)			
3	(1)	SW2 ANT. (tracking)	● VTVM ● Oscilloscope			8 MHz	8 MHz	L151	Max.
4	(1)	SW1 OSC. (covering)	● AM signal generator (400Hz, 30% mod.)	Ferrite-core antenna (Note 3)	Speakers terminal	2.2 MHz	Lowest	L155	Max.
	(2)					7.3 MHz	Highest	CT155	
	(3)					Repeat steps (1) and (2)			
5	(1)	SW1 ANT. (Tracking)	● VTVM ● Oscilloscope			2.7 MHz	2.7 MHz	L153	Max.
	(2)					6.3 MHz	6.3 MHz	CT152	
	(3)					Repeat steps (1) and (2)			
6	(1)	MW OSC. (covering)	● AM signal generator (400Hz, 30% mod.)	Ferrite-core antenna (Note 3)	Speakers terminal	515 kHz	Lowest	L156	Max.
	(2)					1,650 kHz	Highest	CT156	
	(3)					Repeat steps (1) and (2)			
7	(1)	MW ANT. (Tracking)	● VTVM ● Oscilloscope			600 kHz	600 kHz	L152	Max.
	(2)					1,400 kHz	1,400 kHz	CT153	
	(3)					Repeat steps (1) and (2)			

● Adjustment point

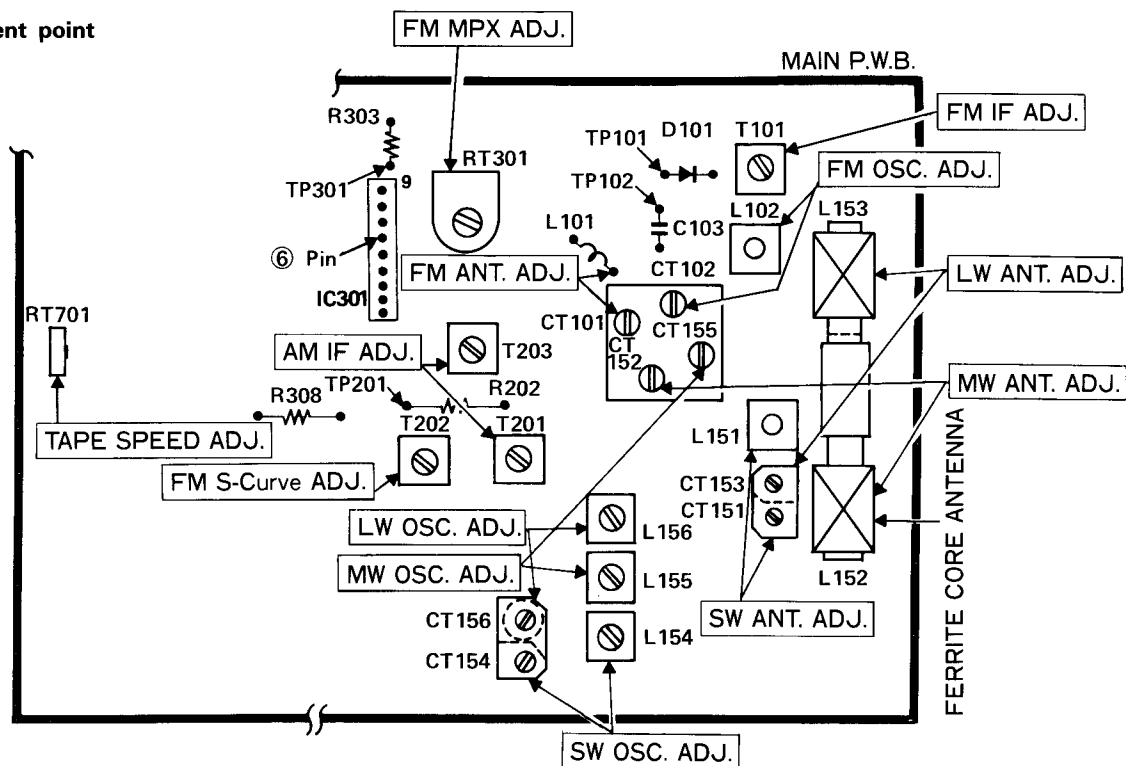


Fig.8

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 Pointer 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)					Repeat step (1).						
2	(1)	SW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	TP101 (through SW dummy antenna) (Note 2)	Speakers terminal	5.8 MHz	Lowest	L154	Max.			
	(2)					18.5 MHz	Highest	CT154				
	(3)					Repeat steps (1) and (2)						
3	(1)	SW ANT. (tracking)				● VTVM ● Oscilloscope			6.5 MHz	6.5 MHz	L151	Max.
	(2)								16 MHz	16 MHz	CT151	
	(3)								Repeat steps (1) and (2)			
4	(1)	MW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal				515 kHz	Lowest	L155	Max.
	(2)								1,650 kHz	Highest	CT155	
	(3)								Repeat steps (1) and (2)			
5	(1)	MW ANT. (Tracking)				● VTVM ● Oscilloscope			600 kHz	600 kHz	L152	Max.
	(2)								1,400 kHz	1,400 kHz	CT152	
	(3)								Repeat steps (1) and (2)			
6	(1)	LW OSC. (covering)	● AM signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal				145 kHz	Lowest	L156	Max.
	(2)								290 kHz	Highest	CT156	
	(3)								Repeat steps (1) and (2)			
7	(1)	LW ANT. (Tracking)				● VTVM (RIF switch:B) ● Oscilloscope			160 kHz	160 kHz	L153	Max.
	(2)								270 kHz	270 kHz	CT153	
	(3)								Repeat steps (1) and (2)			

● Adjustment point

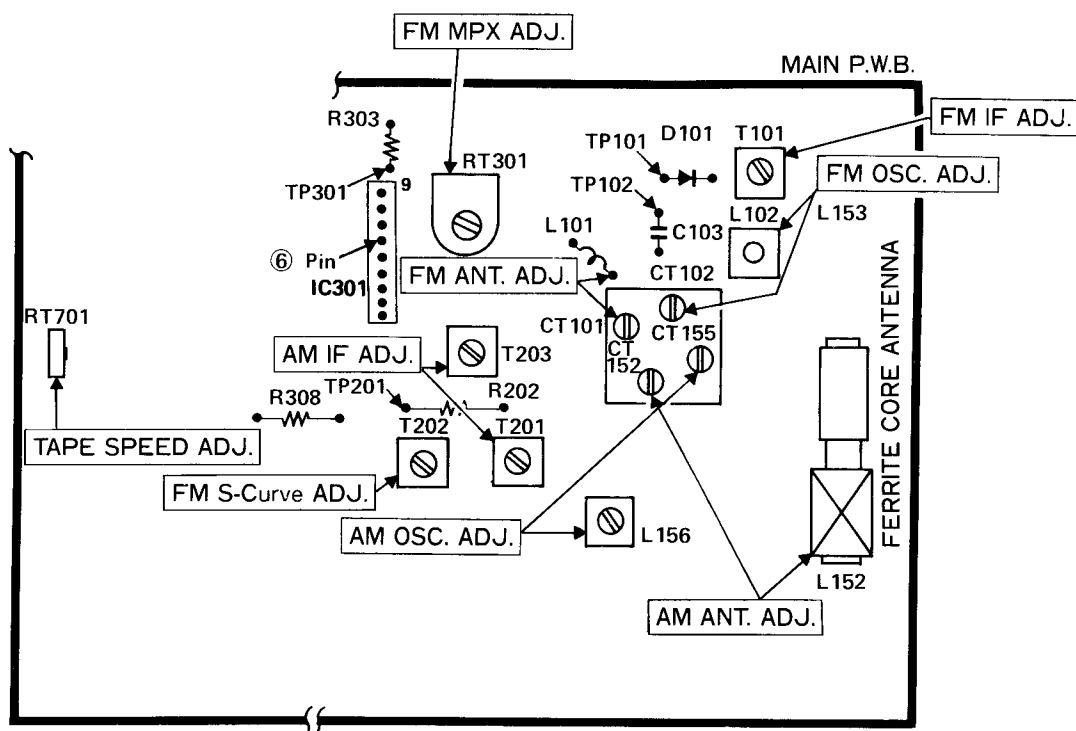


Fig.9

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

Step		Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frquency	Dial Pointor 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)					Repeat steps (1)			
2	(1)	AM OSC. (Covering)	● AM Signal generator (400Hz, 30% mod.) ● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal	515 kHz	Lowest	L156	Max.
	(2)					1,650 kHz	Highest	CT155	
	(3)					Repeat steps (1) and (2)			
3	(1)	AM ANT. (Tracking)	● VTVM ● Oscilloscope	Ferrite-core antenna (Note 3)	Speakers terminal	600 kHz	600 kHz	L152	Max.
	(2)					1,400 kHz	1,400 kHz	CT152	
	(3)					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.			
	(2)					109 MHz *(108 MHz)	Highest	CT102				
	(3)					Repeat steps (1) and (2)						
3	(1)	FM ANT (Tracking)				● FM signal generator (400Hz, 30% dev.) ● Oscilloscope ● VTVM	TP101 (through FM dummy antenna) (Note 6)	Speakers terminal	90 MHz	90 MHz	L101	Max.
	(2)								106 MHz	106 MHz	CT101	
	(3)								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.

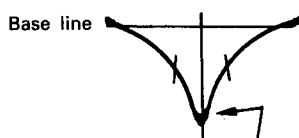


Fig.10

2. SW dummy antenna shows Fig. 11.

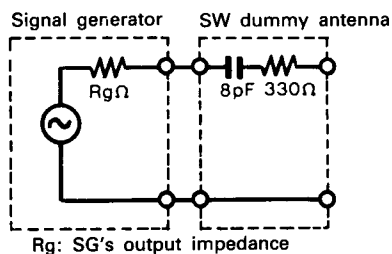


Fig.11

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.

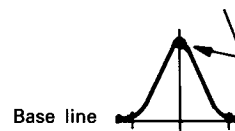


Fig.12

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.

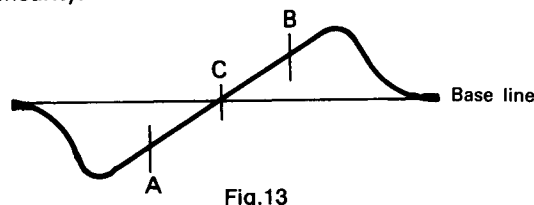


Fig.13

6. FM dummy antenna shows Fig. 14.

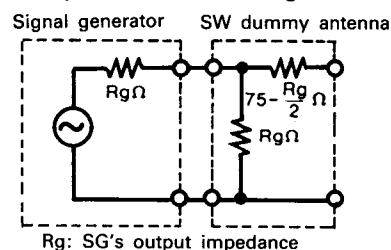
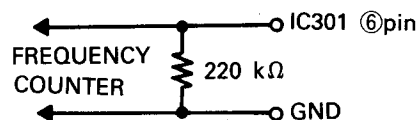


Fig.14

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 $\pm$ 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 (8 Ω load)	Tape speed adjustment tape (3kHz)	Playback (TAPE 2)	RT701	3kHz $\pm$ 20Hz (Note 1)
2	Head azimuth	● VTVM	—	Speakers terminal (8 Ω 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.
- When the maximum values of both channels are different, adjust to the maximum value of the L channel. In this case,
- the difference between the maximum values of both channels should be within 2 dB.
- 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

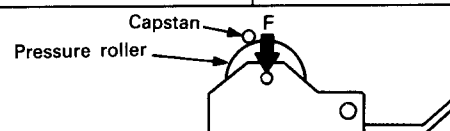


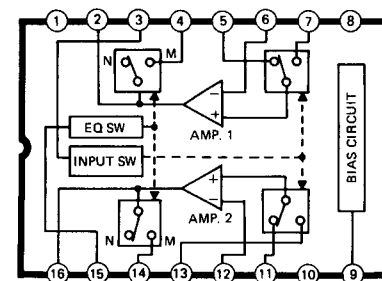
Fig.16

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

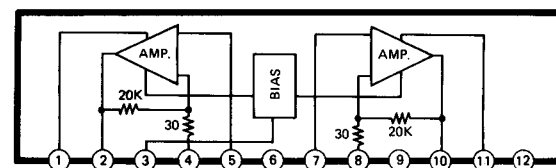


Fig.15

MAIN P.W.B.

RT301

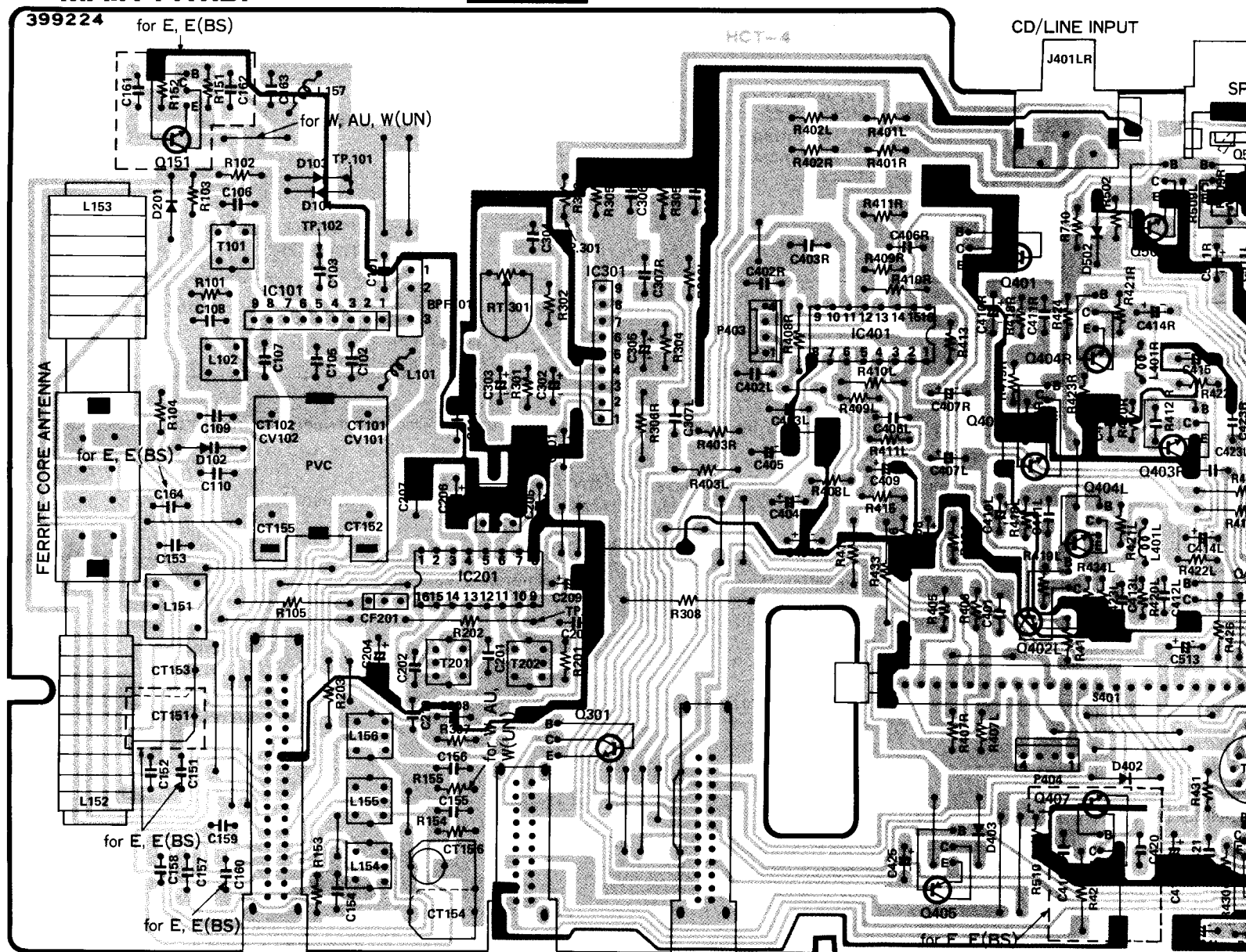
FM MPX ADJ.

399224

for E, E(BS)

HCT-4

CD/LINE INPUT

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.

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

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	15	1.4
8	0	16	5.5 (6.1)

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.T202
FM S-Curve ADJ.T201, T203
AM IF ADJ.L151 (for W, AU)
SW 2 ANT. ADJ.BAND SELECT
SWITCHMODE SELECT/RIF (for E, E(BS))
/DUBBING SPEED
SELECT SWITCHL156, 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.FUNCTION
SELECT SWITCH

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)

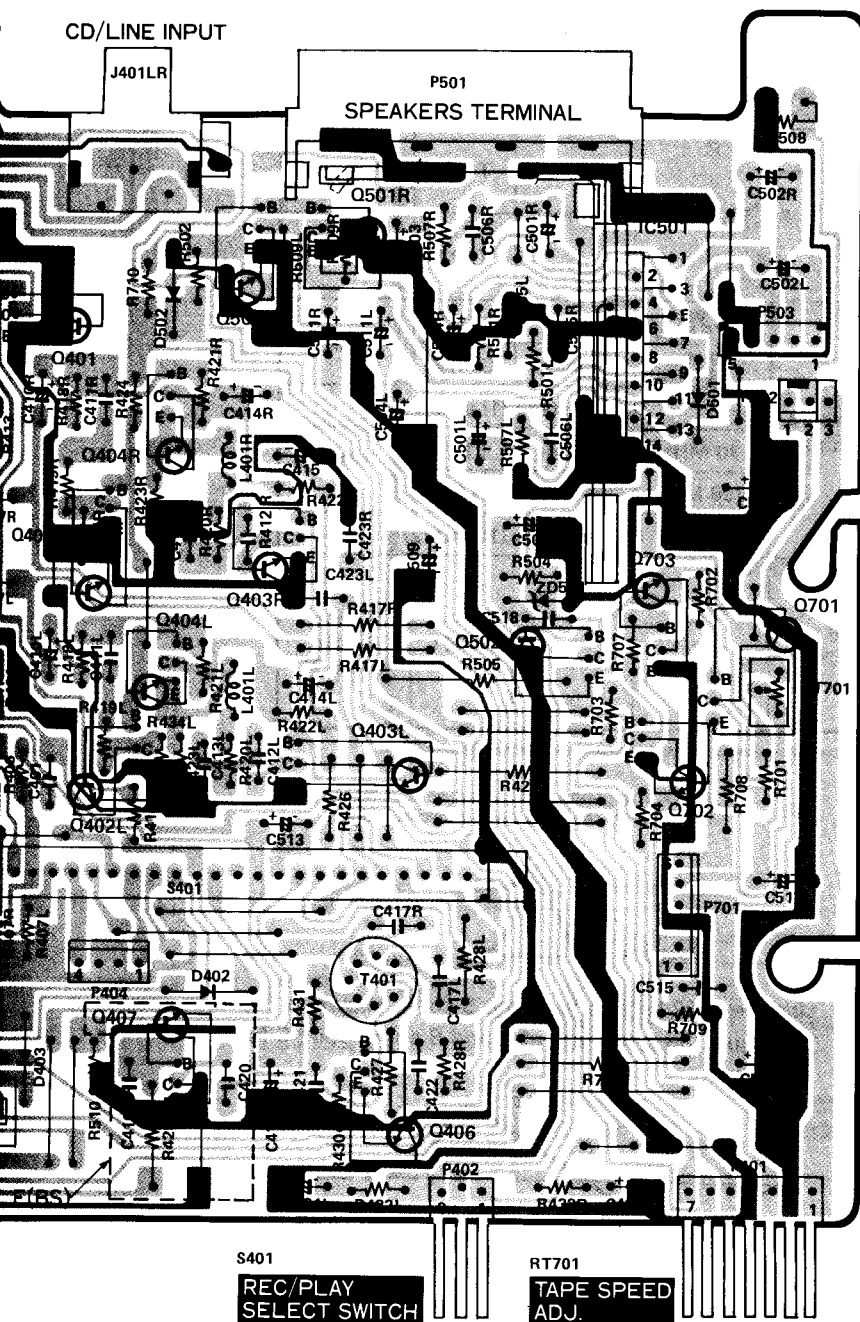
L154, CT154 (for E, E(BS))
SW OSC. ADJ.L155, CT155 (for W, AU)
SW 1 OSC. ADJ.L155, CT155 (for E, E(BS))
MW OSC. ADJ.

Pin No.	Voltage	Pin No.	Voltage
1	6.2	9	2.2
2	2.2	10	2.2
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

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

S401
REC/PLAY
SELECT SW

CD/LINE INPUT



or $E, E(BS)$)

DJ.

or W, AU)

AD-

 $\text{pr } E \mid E(\text{BS})$

ADJ.

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

(): MW

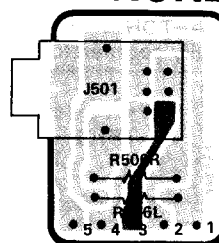
Q406	
E	(0.1)
C	(4.9)
B	(0.7)

(): REC

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

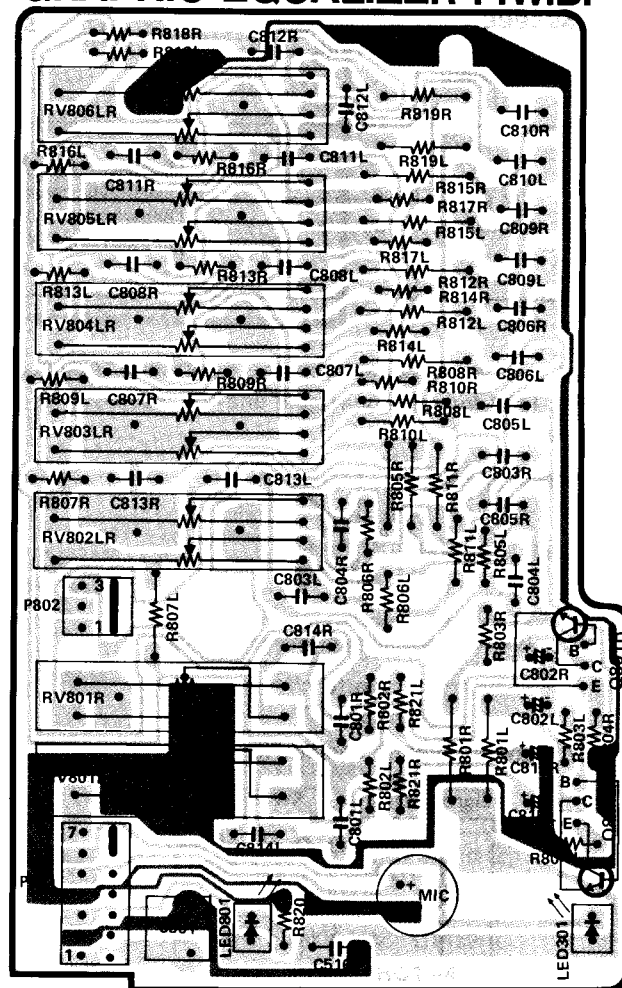
(): MW

HEADPHONES P.W.B.



HEADPHONES
JACK

GRAPHIC EQUALIZER P.W.B.



RV801L, R

VOLUME CONTROL

RV802LR-RV806LR

GRAPHIC EQUALIZER CONTROL

\$501

OPERATE (POWER) SWITCH

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

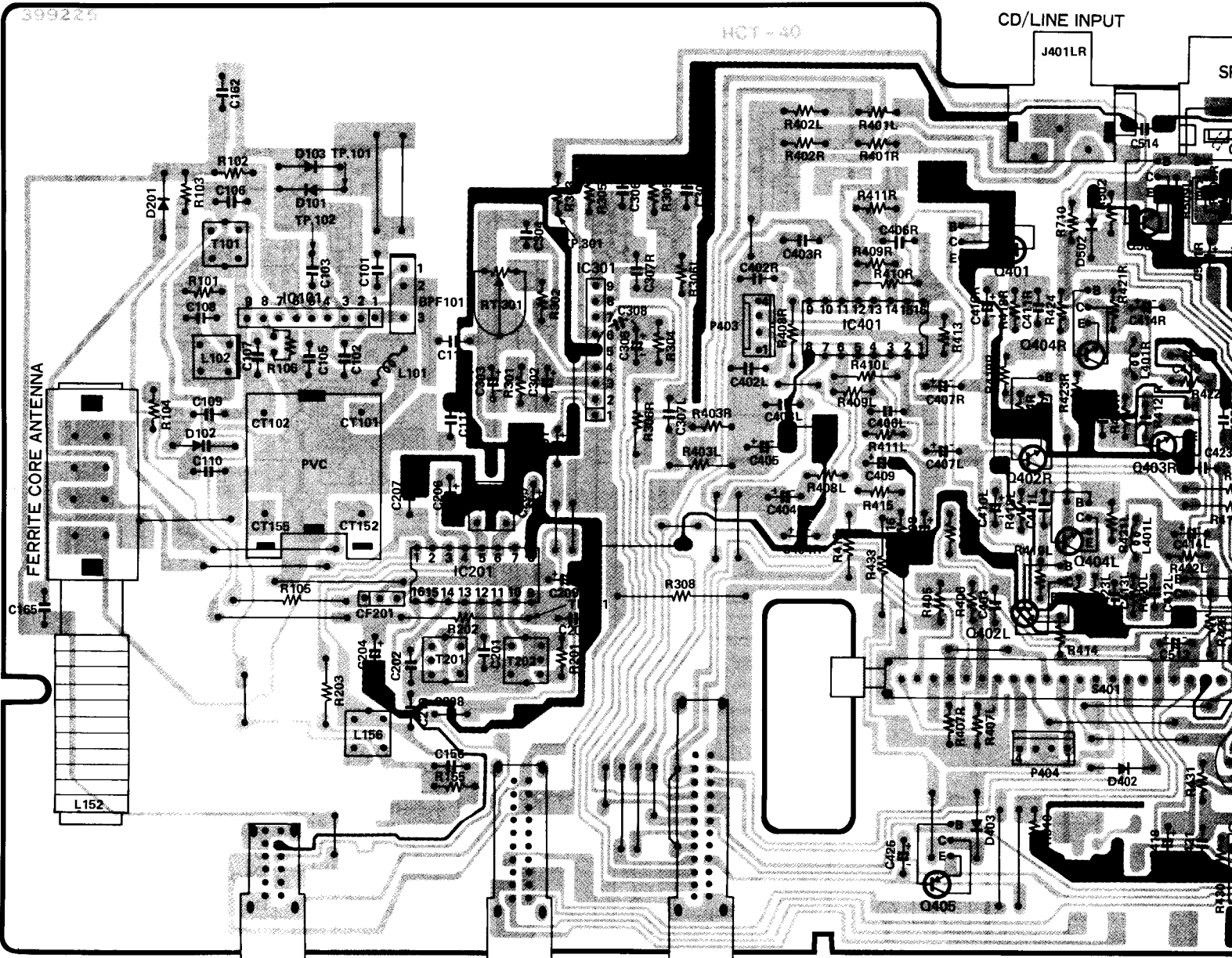
Pin No.	Voltage	Pin No.	Voltage
1	6.0	8	0
2	11.5	9	1.1
3		10	11.4
4	0	11	
5	1.1	12	12.0
6	0	13	6.0
7	11.2	14	0

	E	C	B		E	C	B
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.

399221



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)

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)

IC401

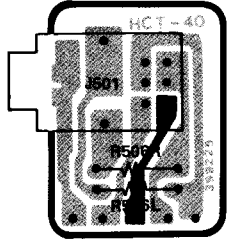
Pin No.	Voltage	Pin No.	Voltage
1	6.2	9	2.2
2	2.2	10	
3	0.2	11	2.2
4	2.2	12	2.2
5	2.2	13	2.2
6	2.2	14	2.2
7	2.2	15	6.2
8	0	16	2.2

	E	C	B	
Q401	0	6.2	0	Q5
Q402	0	0	0	Q5
Q403	0	0	0.6	Q7
Q404	0.9	3.8	1.5	Q7
Q405	7.2	0	7.2	Q7
Q407	0	0	0	Q8

IC501

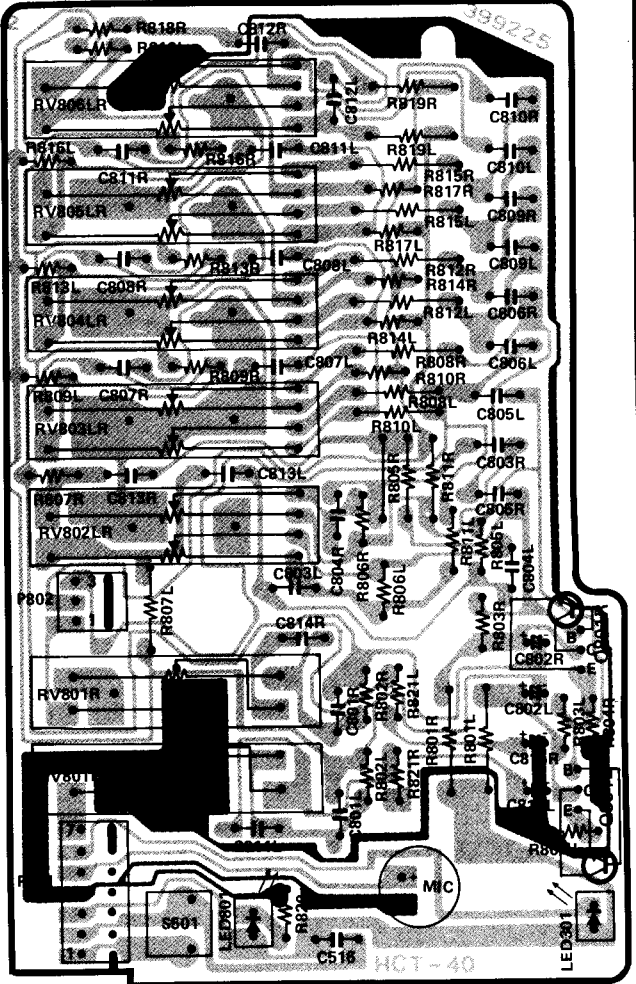
Pin No.	Voltage	Pin No.	Voltage
1	10.9	7	0
2	6.0	8	0.6
3	12.0	9	0
4	0.6	10	6.0
5	0	11	10.9
6	0	12	12.0

HEADPHONES P.W.B.



HEADPHONES JACK

GRAPHIC EQUALIZER P.W.B.



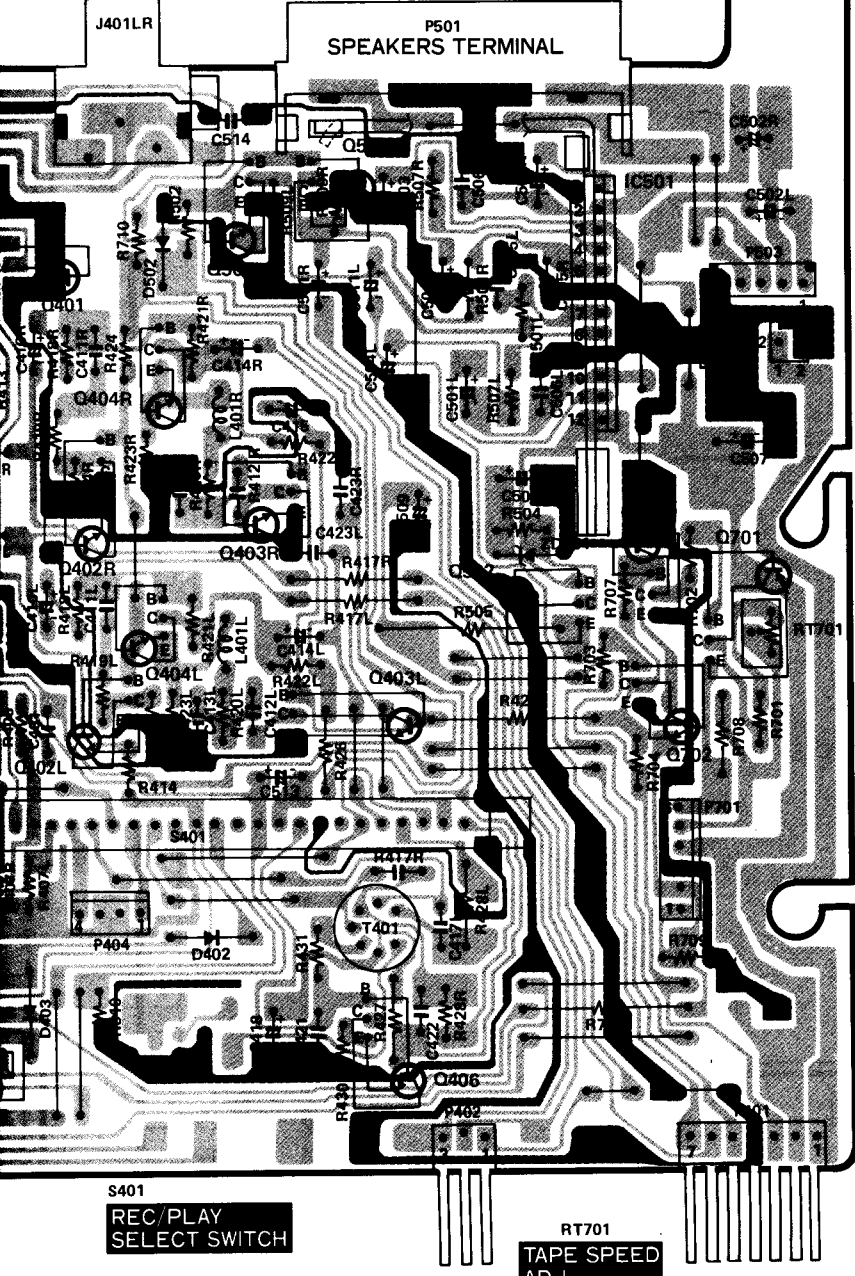
RV801L, R
VOLUME CONTROL

RV802LR-RV806LR
GRAPHIC EQUALIZER CONTROL

S501
OPERATE (POWER) SWITCH

CD/LINE INPUT

P501
SPEAKERS TERMINAL



S401
REC/PLAY
SELECT SWITCH

RT701
TAPE SPEED
ADJ.

	E	C	B		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

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)

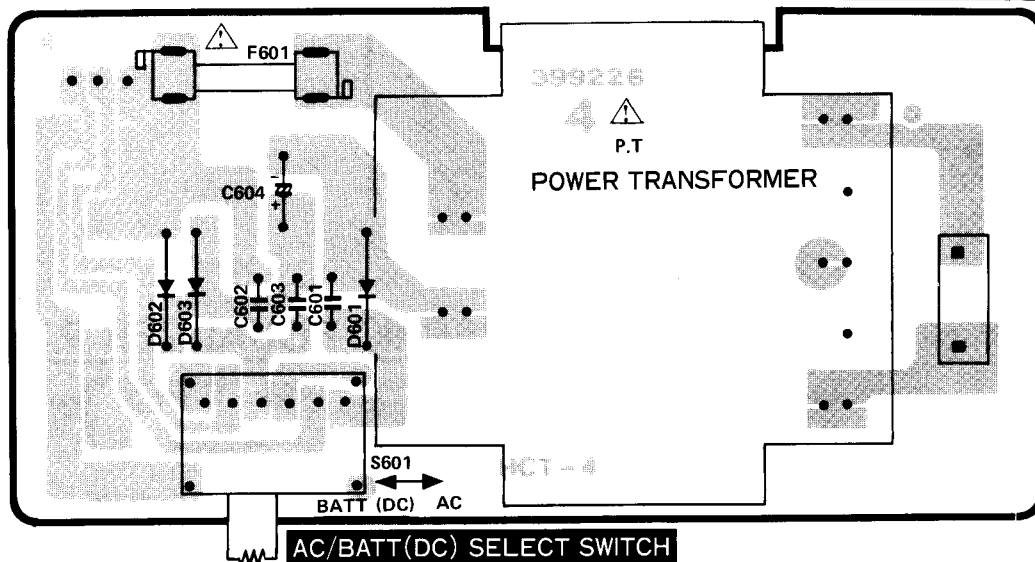
Q406	
E	(0.1)
C	(4.9)
B	(0.7)

TA7283AP	TA7343AP TA7358P	TA7640AP TA7784P	μPC1288V	2SA844E 2SC458C 2SC460C 2SC945P HIT8050C	1N4148 1S2790 HZ9B3	1N4002

PRINTED WIRING BOARD (: Others)

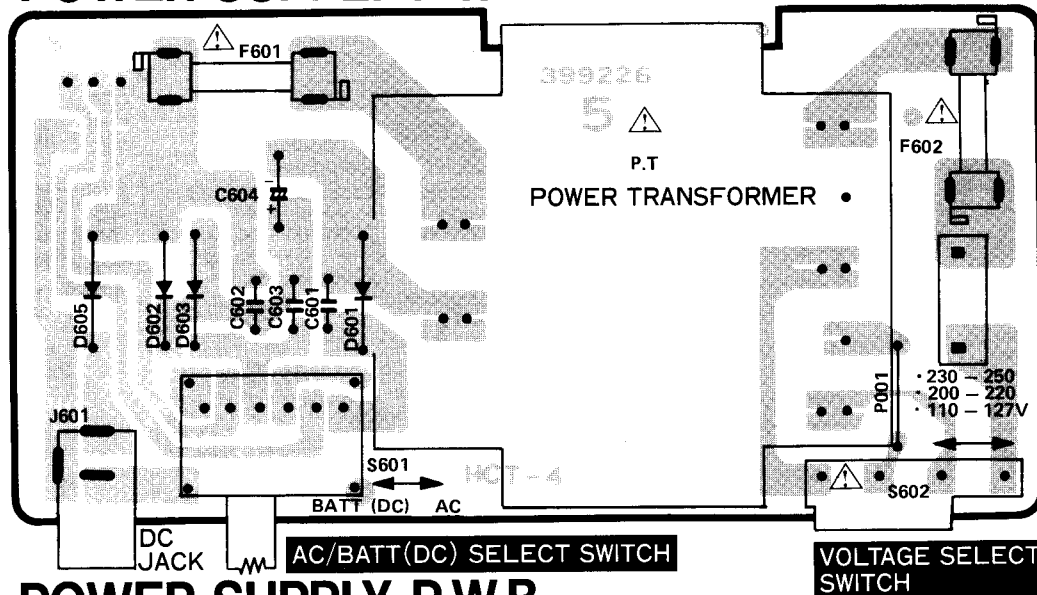
POWER SUPPLY P.W.B.

for E, E(BS), AU



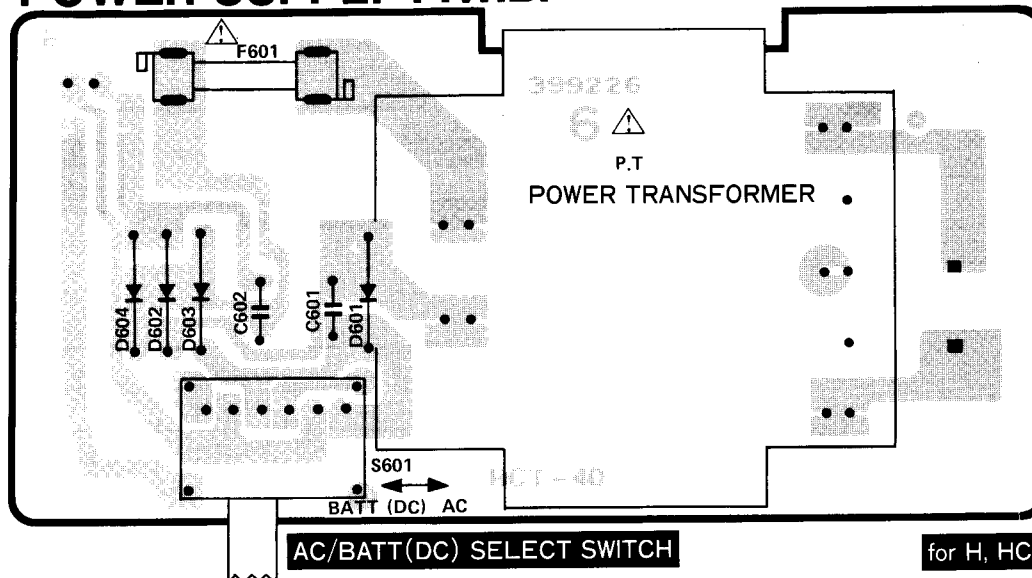
POWER SUPPLY P.W.B.

for W, W(UN)

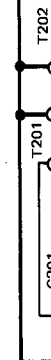


POWER SUPPLY P.W.B.

for H, HC



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.

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

MODE SELECT / DUBBING SPEED SELECT SWITCH

FM MPX ADJ.

ROD. ANTENNA

L151 SW 2 ANT. ADJ.

L101, CT101 FM ANT. ADJ.

L102, CT102 FM OSC. ADJ.

BAND SELECT SWITCH

SW 2 OSC ADJ.

L152, CT153 MW ANT. ADJ.

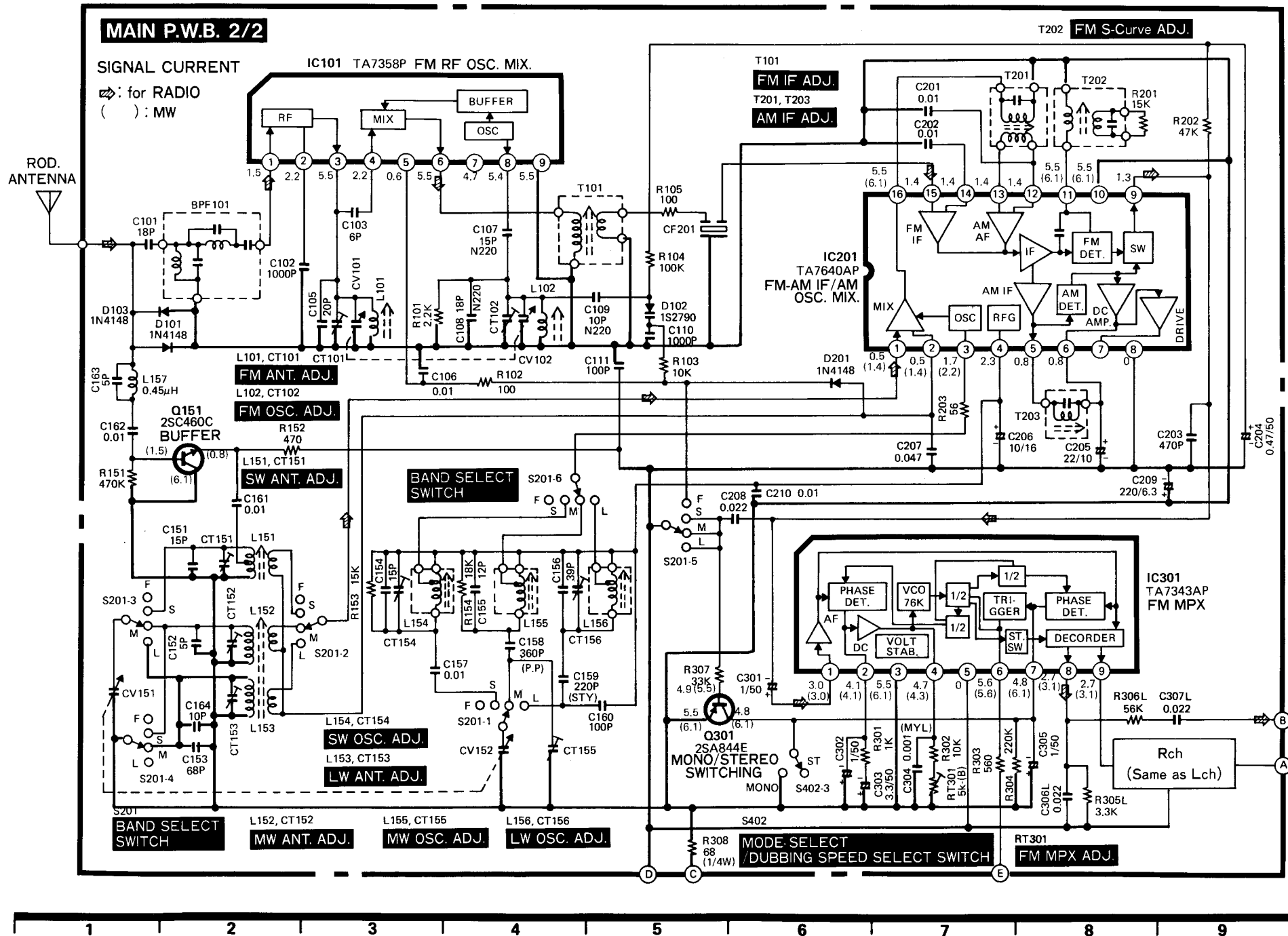
BAND SELECT SWITCH

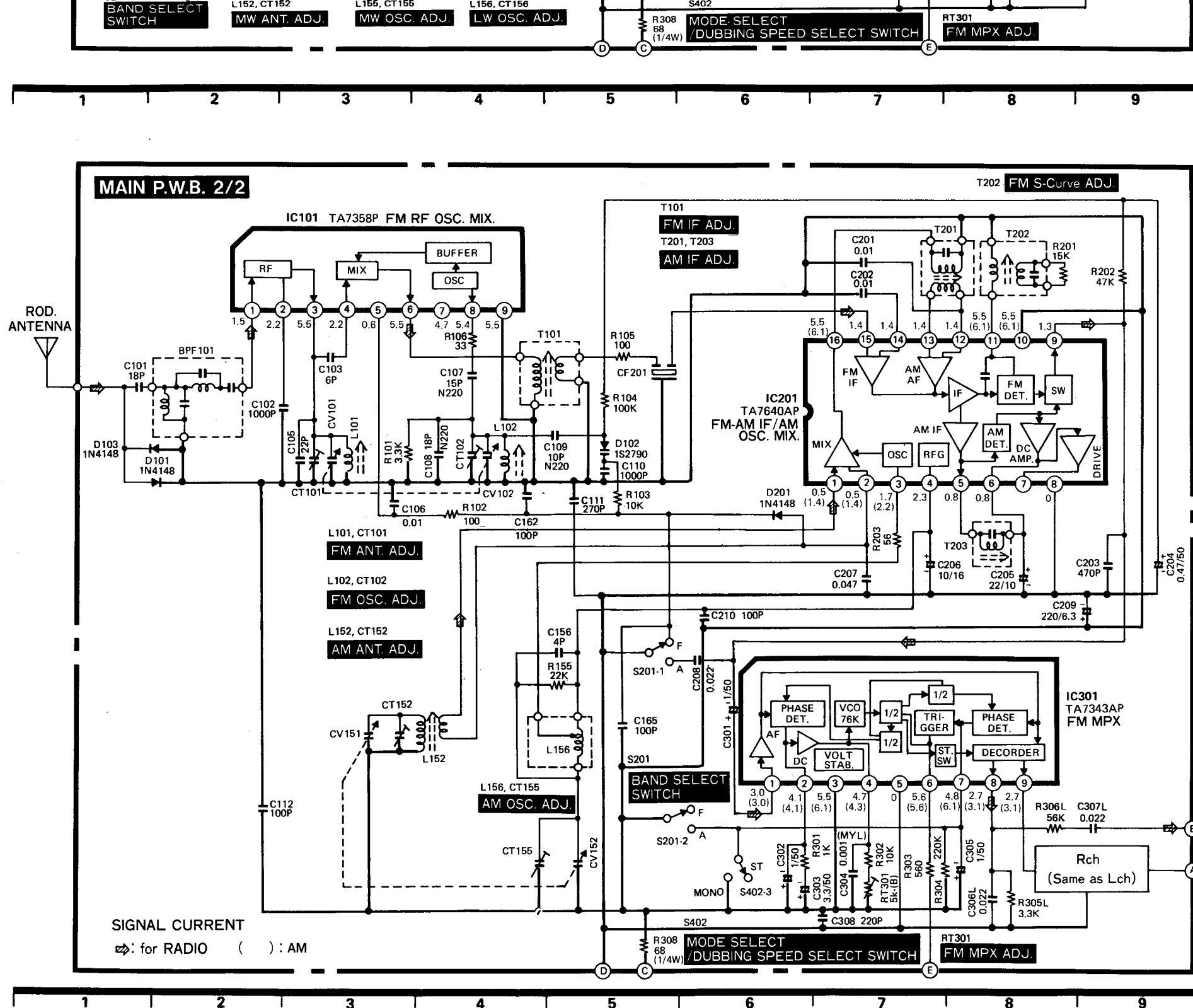
L153, CT152 SW 1 ANT. ADJ.

L155, CT155 SW 1 OSC. ADJ.

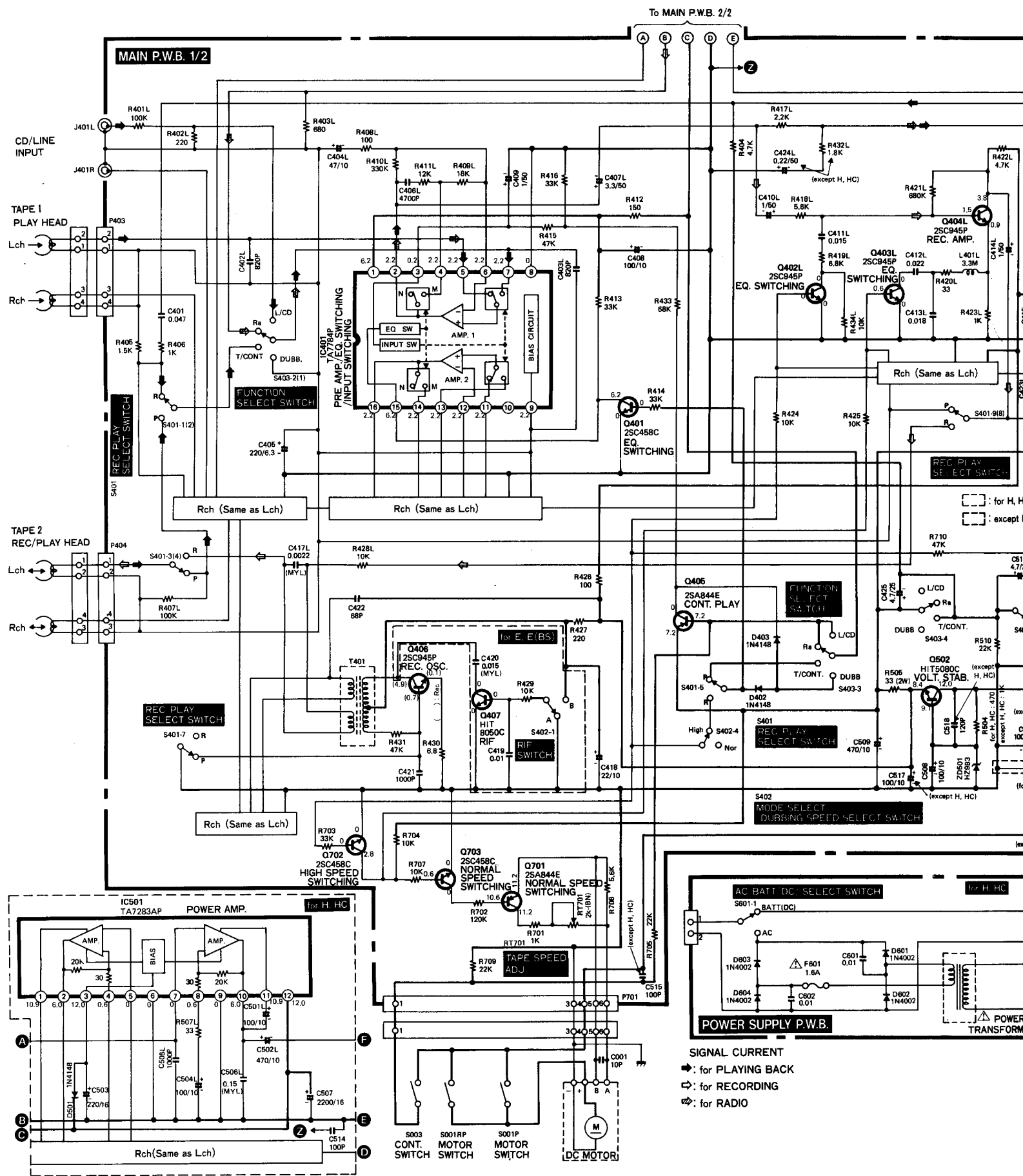
L156, CT156 MW OSC. ADJ.

Rch (Same as Lch)



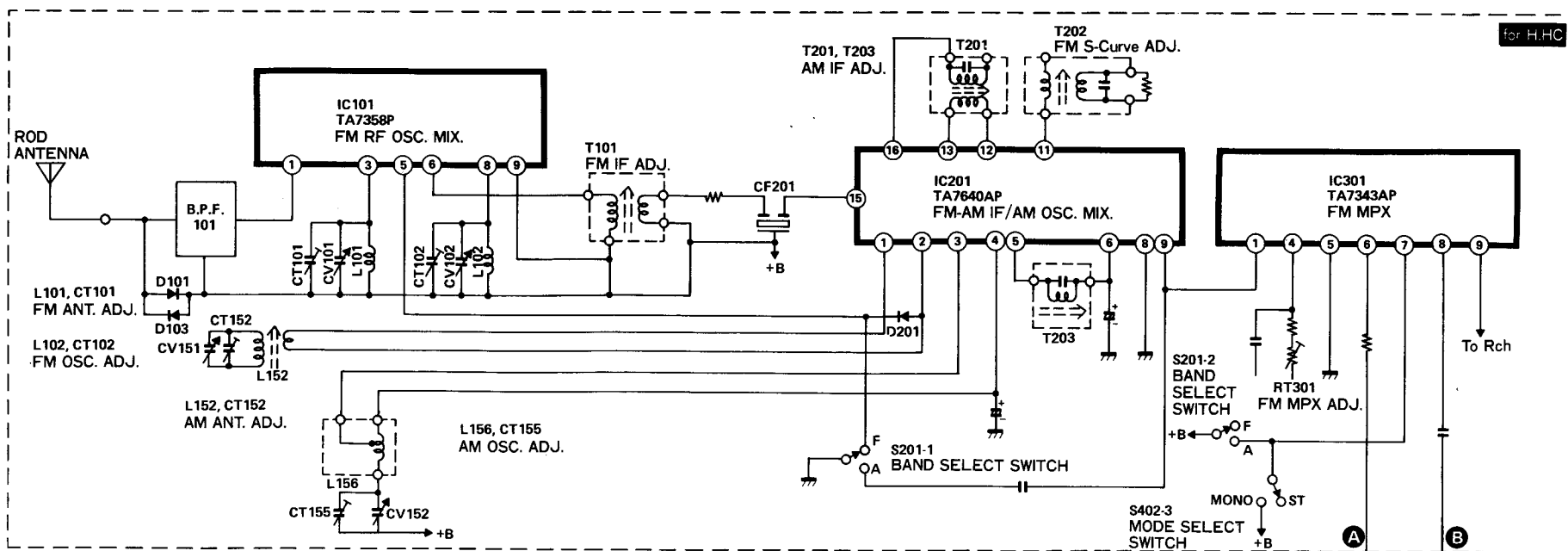
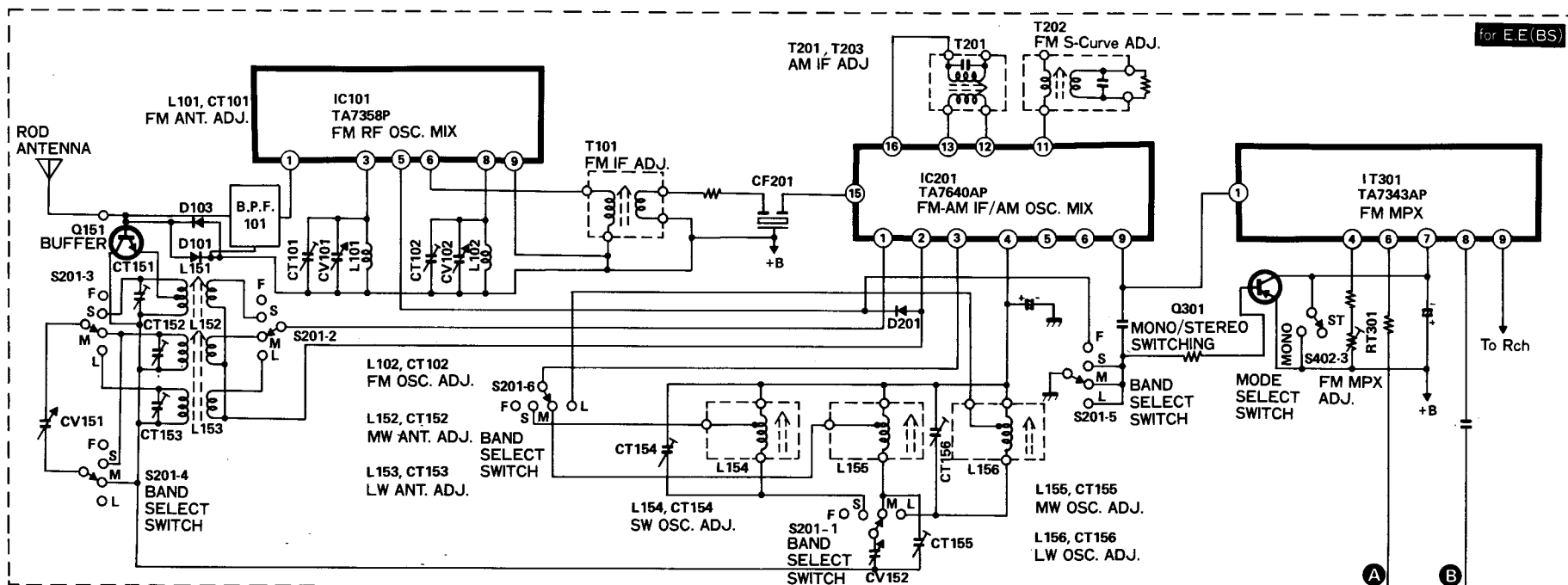
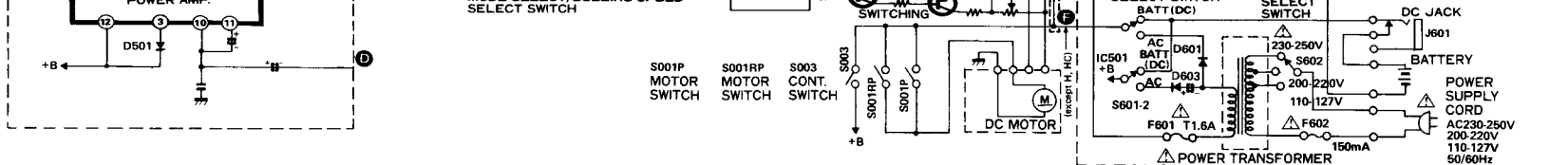


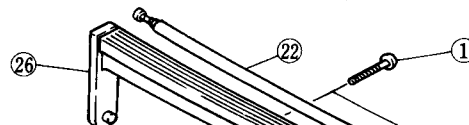
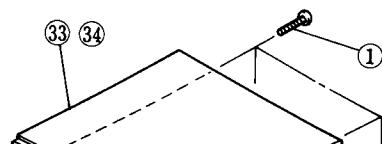
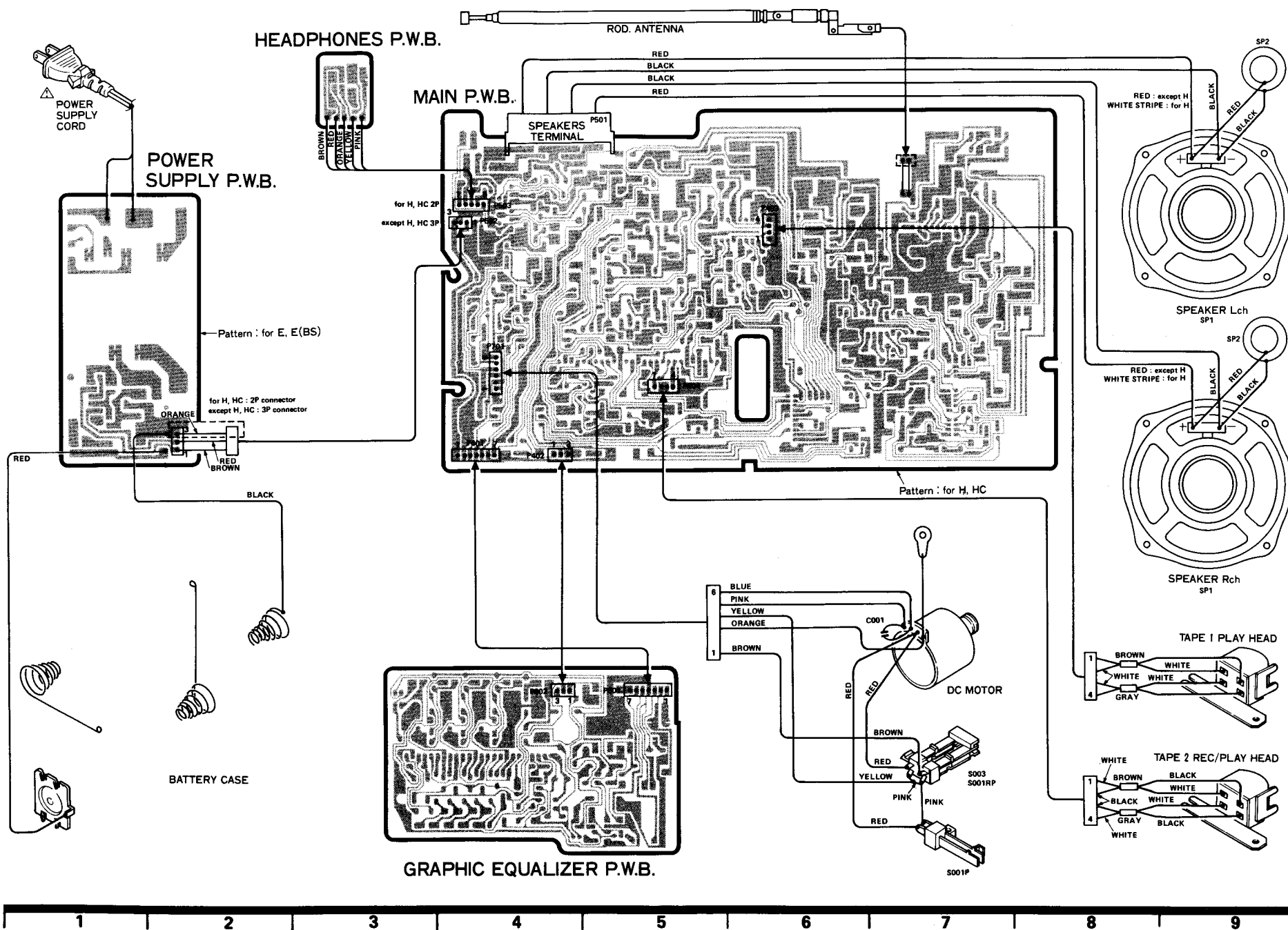
CIRCUIT DIAGRAM (— : + B)

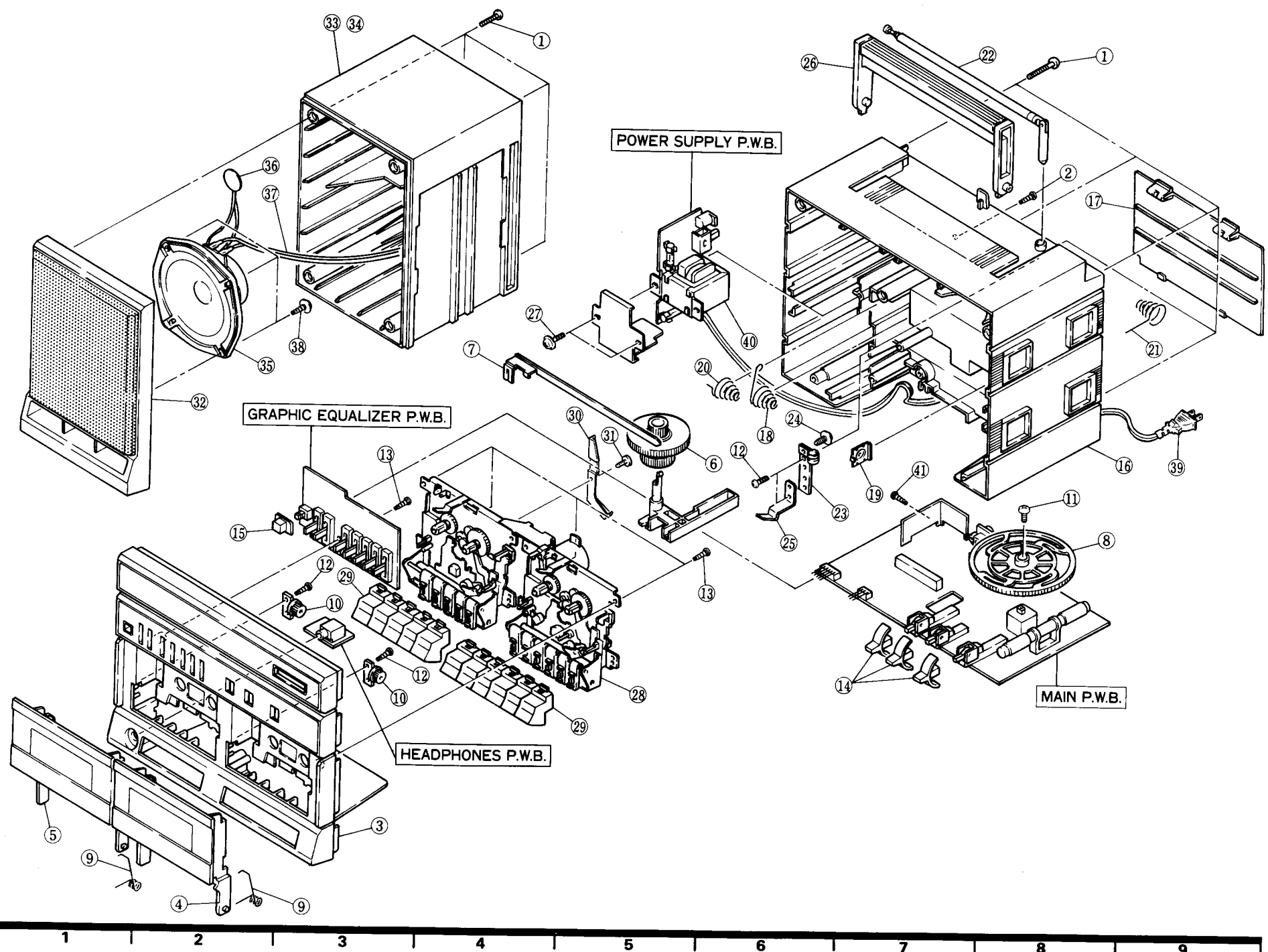




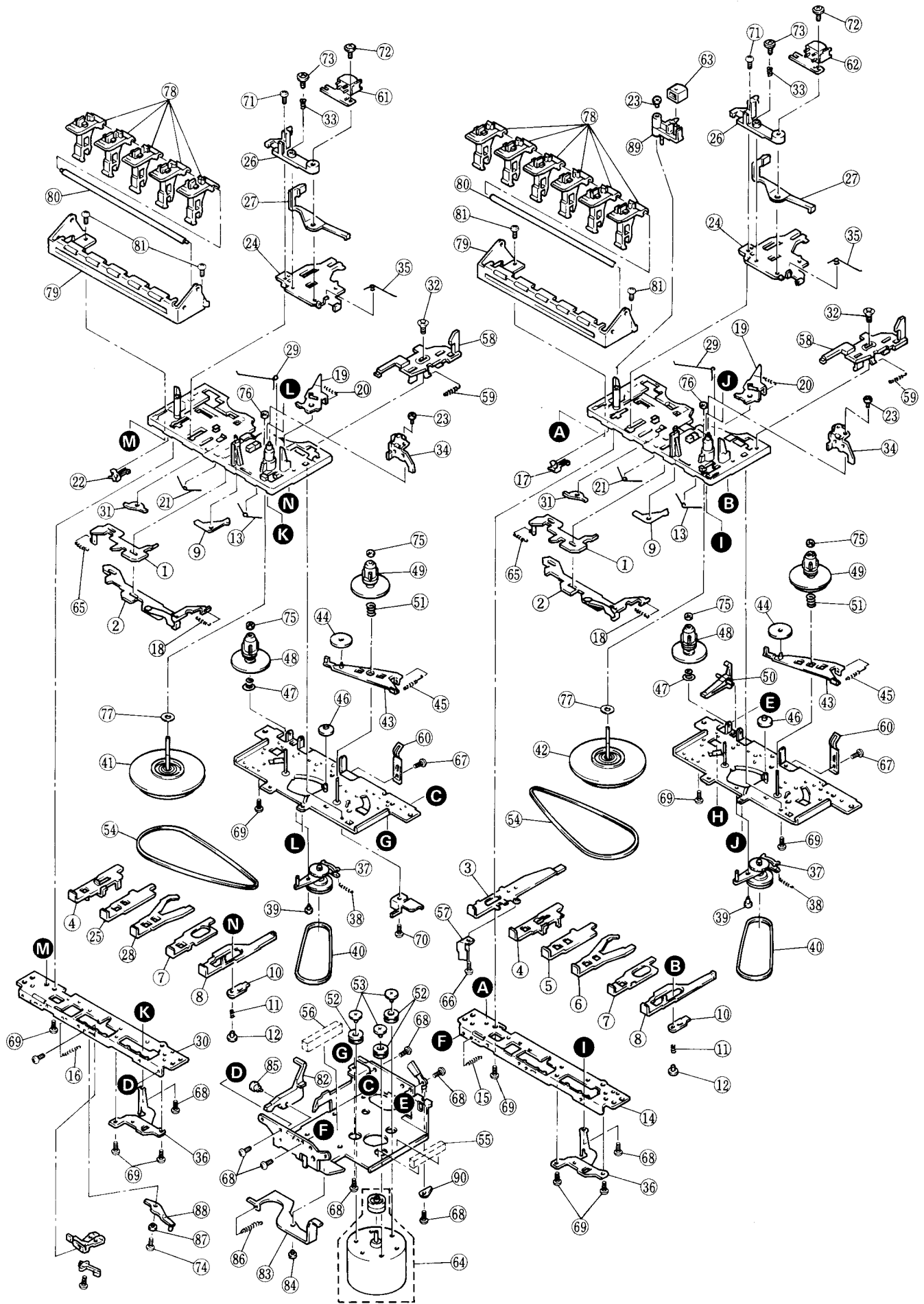
BLOCK DIAGRAM [for E, E(BS), H, HC]







(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 μ F $\pm \frac{80\%}{20\%}$	50V	C502LR	02523352	EL	470 μ F $\pm 20\%$	10V			
C101	02086662	CD	18PF	± 5%	50V			[for E, E(BS)]						[for H, HC]				
C102	0209161	CD	1000PF	± 20%	50V	C164	02086502	CD	5PF	± 0.25PF	50V		02525352	EL	470 μ F $\pm 20\%$	16V		
C103	0208646	CD	6PF	± 0.5PF	50V			[except H, HC]				C503	0252532	EL	220 μ F $\pm 20\%$	16V		
C105	02086682	CD	22PF	± 5%	50V	C165	02086842	CD	100PF	± 5%	50V		02527322	EL	220 μ F $\pm 20\%$	35V		
		[for H, HC]						[for H, HC]						[except H, HC]				
	02486672	CD	20PF	± 5%	50V	C201	02441712	CD	0.01 μ F $\pm \frac{80\%}{20\%}$	50V	C504LR	02523312	EL	100 μ F $\pm 20\%$	10V			
		[except H, HC]				C202	02441712	CD	0.01 μ F $\pm \frac{80\%}{20\%}$	50V	C505LR	02091612	CD	1000PF	± 20%	50V		
C106	02441712	CD	0.01 μ F	± 20%	50V	C203	02097232	CD	470PF	± 10%	50V	C506LR	0276012	MF	0.15 μ F $\pm 10\%$	50V		
C107	0208034	CD	15PF	± 5%	50V	C204	02528052	EL	0.47 μ F $\pm 20\%$	50V				[for H, HC]				
													02760112	MF	0.1 μ F $\pm 10\%$	50V		
C108	0208036	CD	18PF	± 5%	50V	C205	02523222	EL	22 μ F $\pm 20\%$	10V				[except H, HC]				
C109	0208020	CD	10PF	± 0.5PF	50V	C206	0252521	EL	10 μ F $\pm 20\%$	16V	C507	0252542	EL	2200 μ F $\pm 20\%$	16V			
C110	0209161	CD	1000PF	± 20%	50V	C207	02441752	CD	0.047 μ F $\pm \frac{80\%}{20\%}$	50V				[for H, HC]				
C111	0208694	CD	270PF	± 5%	50V	C208	02441732	CD	0.022 μ F $\pm \frac{80\%}{20\%}$	50V			02527412	EL	1000 μ F $\pm 20\%$	35V		
		[for H, HC]				C209	02522322	EL	220 μ F $\pm 20\%$	6.3V				[except H, HC]				
	0208684	CD	100PF	± 5%	50V	C210	0248684	CD	100PF	± 5%	50V	C508	02523312	EL	100 μ F $\pm 20\%$	10V		
		[except H, HC]						[for H, HC]				C509	02523352	EL	470 μ F $\pm 20\%$	10V		
C112	02086842	CD	100PF	± 5%	50V		0240212	CD	0.01 μ F $\pm 10\%$	25V		C510	0252541	EL	1000 μ F $\pm 20\%$	16V		
		[for H, HC]				C301	02528112	EL	1 μ F $\pm 20\%$	50V				[except H, HC]				
C151	0208664	CD	15PF	± 5%	50V						C511LR	0252801	EL	0.1 μ F $\pm 20\%$	50V			
		[for E, E(BS)]				C302	02528112	EL	1 μ F $\pm 20\%$	50V				[for H, HC]				
C152	0208635	CD	5PF	± 0.25PF	50V	C303	02528132	EL	3.3 μ F $\pm 20\%$	50V		0252802	EL	0.22 μ F $\pm 20\%$	50V			
		[for E, E(BS)]				C304	02684462	MF	0.001 μ F $\pm 5\%$	100V				[except H, HC]				
	0208633	CD	3PF	± 0.25PF	50V	C305	02528112	EL	1 μ F $\pm 20\%$	50V	C513	02526152	EL	4.7 μ F $\pm 20\%$	25V			
		[for W, AU, W(UN)]				C306LR	02441732	CD	0.022 μ F $\pm \frac{80\%}{20\%}$	50V	C514	02086842	CD	100PF	± 5%	50V		
C153	02086802	CD	68PF	± 5%	50V	C307LR	02097632	CD	0.022 μ F $\pm 20\%$	25V				[for H, HC]				
		[for E, E(BS)]				C308	0208692	CD	220PF	± 10%	50V	C515	02086842	CD	100PF	± 5%	50V	
	02086472	CD	7PF	± 0.5PF	50V			[for H, HC]						[except H, HC]				
		[for W, AU, W(UN)]				C401	02441752	CD	0.047 μ F $\pm \frac{80\%}{20\%}$	50V	C516	02086842	CD	100PF	± 5%	50V		
C154	0208664	CD	15PF	± 5%	50V	C402LR	02097262	CD	820PF	± 10%	50V	C517	02523312	EL	100 μ F $\pm 20\%$	10V		
		[for E, E(BS)]				C403LR	02097262	CD	820PF	± 10%	50V			[except H, HC]				
	02086502	CD	10PF	± 0.5PF	50V	C404LR	02523252	EL	47 μ F $\pm 20\%$	10V	C518	02086862	CD	120PF	± 5%	50V		
		[for W, AU, W(UN)]												[except H, HC]				
C155	0208662	CD	12PF	± 5%	50V	C405	02522322	EL	220 μ F $\pm 20\%$	6.3V								
		[for E, E(BS)]				C406LR	02097352	CD	4700PF	± 10%	50V	C601	02441712	CD	0.01 μ F $\pm \frac{80\%}{20\%}$	50V		
	02086482	CD	8PF	± 0.5PF	50V	C407LR	02528132	EL	3.3 μ F $\pm 20\%$	50V	C602	02441712	CD	0.01 μ F $\pm \frac{80\%}{20\%}$	50V			
		[for W, AU, W(UN)]				C408	02523312	EL	100 μ F $\pm 20\%$	10V	C603	02441712	CD	0.01 μ F $\pm \frac{80\%}{20\%}$	50V			
C156	0208634	CD	4PF	± 0.25PF	50V	C409	02528112	EL	1 μ F $\pm 20\%$	50V				[except H, HC]				
		[for H, HC]				C410LR	02528112	EL	1 μ F $\pm 20\%$	50V	C604	02526362	EL	1000 μ F $\pm 20\%$	25V			
	02086742	CD	39PF	± 5%	50V	C411LR	02097622	CD	0.015 μ F $\pm 20\%$	25V				[except H, HC]				
		[for E, E(BS)]				C412LR	02097632	CD	0.022 μ F $\pm 20\%$	25V	C801LR	02097352	CD	4700PF	± 10%	50V		
	0208662	CD	12PF	± 5%	50V	C413LR	0240215	CD	0.018 μ F $\pm 10\%$	25V	C802LR	0252521	EL	10 μ F $\pm 20\%$	16V			
		[for W, AU, W(UN)]				C414LR	02528112	EL	1 μ F $\pm 20\%$	50V	C803LR	0240210	CD	6800PF	± 10%	25V		
C157	02097372	CD	0.01 μ F	± 10%	50V						C804LR	0209765	CD	0.047 μ F $\pm 20\%$	25V			
		[except H, HC]				C415	02523312	EL	100 μ F $\pm 20\%$	10V								
C158	0268321	PP	360PF	± 5%	100V	C417LR	02740132	MF	0.0022 μ F $\pm 10\%$	50V	C805LR	02097632	CD	0.022 μ F $\pm 20\%$	25V			
		[for E, E(BS)]				C418	02523222	EL	22 μ F $\pm 20\%$	10V	C806LR	02097632	CD	0.022 μ F $\pm 20\%$	25V			
	0268442	PP	0.0015 μ F	± 5%	100V	C419	02441712	CD	0.01 μ F $\pm \frac{80\%}{20\%}$	50V				[for E, E(BS)]				
		[for W, AU, W(UN)]									C807LR	02097352	CD	4700PF	± 10%	50V		
C159	02213192	ST	220PF	± 5%	50V	C420	02750122	MF	0.015 μ F $\pm 10\%$	50V				[for E, E(BS)]				
		[for E, E(BS)]									C808LR	02097342	CD	3300PF	± 10%	50V		
	0268321	PP	360PF	± 5%	100V	C421	02097312	CD	1000PF	± 10%	50V	C809LR	02097612	CD	0.01 μ F $\pm 20\%$	25V		
		[for W, AU, W(UN)]				C422	02086802	CD	68PF	± 5%	50V	C810LR	0240210	CD	6800PF	± 10%	25V	
						C423LR	02091612	CD	1000PF	± 20%	50V	C811LR	02097322	CD	1500PF	± 10%	50V	
C160	02086842	CD	100PF	± 5%	50V									CD	220PF	± 5%	50V	
		[for E, E(BS)]				C424LR	0252802	EL	0.22 μ F $\pm 20\%$	50V	C812LR	02086922	CD	220PF	± 5%	50V		
C161	02441712	CD	0.01 μ F	± 20%	50V			[except H, HC]			C813LR	0240210	CD	6800PF	± 10%	25V		
		[for E, E(BS)]				C425	02526152	EL	4.7 μ F $\pm 20\%$	25V	C814LR	02097612	CD	0.01 μ F $\pm 20\%$	25V			
C162	02086842	CD	100PF	± 5%	50V	C501LR	0252331	EL	100 μ F $\pm 20\%$	10V	C815LR	0252802	EL	0.22 μ F $\pm 20\%$	50V			
		[for H, HC]																
							02525312	EL	100 μ F $\pm 20\%$	16V				[except H, HC]				

SYMBOL No.		PART No.	DESCRIPTION			SYMBOL No.		PART No.	DESCRIPTION			SYMBOL No.		PART No.	DESCRIPTION		
RESISTORS						ICs & TRANSISTORS											
R101	0113627	CF 3.3KΩ ±5%	SRD1/6P	[for H, HC]		R422LR	0113631	CF 4.7KΩ ±5%	SRD1/6P		IC101	2398201	TA7358P				
	0113623	CF 2.2KΩ ±5%	SRD1/6P	[except H, HC]		R423LR	0113615	CF 1KΩ ±5%	SRD1/6P		IC201	2389511	TA7640AP				
R102	0113591	CF 100Ω ±5%	SRD1/6P			R424	0113639	CF 10KΩ ±5%	SRD1/6P		IC301	2301041	TA7343AP				
R103	0113639	CF 10KΩ ±5%	SRD1/6P			R425	0113639	CF 10KΩ ±5%	SRD1/6P		IC401	2301191	TA7784P				
R104	0113663	CF 100KΩ ±5%	SRD1/6P			R426	0113591	CF 100Ω ±5%	SRD1/6P		IC501	2301181	TA7283AP				
R105	0113591	CF 100Ω ±5%	SRD1/6P			R427	0113599	CF 220Ω ±5%	SRD1/6P			2300871	μ PC1288V				
						R428LR	0113639	CF 10KΩ ±5%	SRD1/6P				[except H, HC]				
R106	0129407	CF 33Ω ±5%	SRD1/4P	[for H, HC]		R429	0113639	CF 10KΩ ±5%	SRD1/6P								
R151	0113679	CF 470KΩ ±5%	SRD1/6P	[for E, E(BS)]		R430	0113563	CF 6.8Ω ±5%	SRD1/6P								
R152	0113607	CF 470Ω ±5%	SRD1/6P	[for E, E(BS)]													
R153	0113643	CF 15KΩ ±5%	SRD1/6P	[for E, E(BS)]		R431	0113655	CF 47KΩ ±5%	SRD1/6P								
	0113647	CF 22KΩ ±5%	SRD1/6P	[for W, AU, W(UN)]		R432LR	0113621	CF 1.8KΩ ±5%	SRD1/6P								
R154	0113645	CF 18KΩ ±5%	SRD1/6P	[for E, E(BS)]		R433	0113659	CF 68KΩ ±5%	SRD1/6P								
	0113639	CF 10KΩ ±5%	SRD1/6P	[for W, AU, W(UN)]		R434LR	0113639	CF 10KΩ ±5%	SRD1/6P								
R155	0113647	CF 22KΩ ±5%	SRD1/6P	[for H, HC]		R501LR	0113615	CF 1KΩ ±5%	SRD1/6P								
	0113645	CF 18KΩ ±5%	SRD1/6P	[for W, AU, W(UN)]		R502	0113623	CF 2.2KΩ ±5%	SRD1/6P								
						R504	0113607	CF 470Ω ±5%	SRD1/6P								
R201	0113643	CF 15KΩ ±5%	SRD1/6P				0113615	CF 1KΩ ±5%	SRD1/6P								
R202	0113655	CF 47KΩ ±5%	SRD1/6P														
R203	0113585	CF 56Ω ±5%	SRD1/6P			R505	11195072	MO 33Ω ±10%	RS2B								
R301	0113615	CF 1KΩ ±5%	SRD1/6P			R506LR	0113587	CF 68Ω ±5%	SRD1/6P								
R302	0113639	CF 10KΩ ±5%	SRD1/6P			R507LR	0113579	CF 33Ω ±5%	SRD1/6P								
R303	0113609	CF 560Ω ±5%	SRD1/6P														
R304	0113671	CF 220KΩ ±5%	SRD1/6P				0113551	CF 2.2Ω ±5%	SRD1/6P								
R305LR	0113627	CF 3.3KΩ ±5%	SRD1/6P														
R306LR	0113657	CF 56KΩ ±5%	SRD1/6P			R508	01111552	MO 1.2KΩ ±5%	RS1B								
R307	0113651	CF 33KΩ ±5%	SRD1/6P	[except H, HC]													
R308	0129551	CF 68Ω ±5%	SRD1/4P			R509LR	0113651	CF 33KΩ ±5%	SRD1/6P								
						R510	0113647	CF 22KΩ ±5%	SRD1/6P								
R401LR	0113663	CF 100KΩ ±5%	SRD1/6P			R701	0113615	CF 1KΩ ±5%	SRD1/6P								
R402LR	0113599	CF 220Ω ±5%	SRD1/6P			R702	0113665	CF 120KΩ ±5%	SRD1/6P								
R403LR	0113611	CF 680Ω ±5%	SRD1/6P			R703	0113651	CF 33KΩ ±5%	SRD1/6P								
R404	0113631	CF 4.7KΩ ±5%	SRD1/6P			R704	0113639	CF 10KΩ ±5%	SRD1/6P								
R405	0113619	CF 1.5KΩ ±5%	SRD1/6P			R705	0113647	CF 22KΩ ±5%	SRD1/6P								
R406	0113615	CF 1KΩ ±5%	SRD1/6P			R707	0113639	CF 10KΩ ±5%	SRD1/6P								
R407LR	0113663	CF 100KΩ ±5%	SRD1/6P			R708	0113633	CF 5.6KΩ ±5%	SRD1/6P								
R408LR	0113591	CF 100Ω ±5%	SRD1/6P			R709	0113647	CF 22KΩ ±5%	SRD1/6P								
R409LR	0113645	CF 18KΩ ±5%	SRD1/6P			R710	0113655	CF 47KΩ ±5%	SRD1/6P								
R410LR	0113675	CF 330KΩ ±5%	SRD1/6P			R801LR	0113631	CF 4.7KΩ ±5%	SRD1/6P								
R411LR	0113641	CF 12KΩ ±5%	SRD1/6P			R802LR	0113639	CF 10KΩ ±5%	SRD1/6P								
R412	0113595	CF 150Ω ±5%	SRD1/6P			R803LR	0113683	CF 680KΩ ±5%	SRD1/6P								
R413	0113651	CF 33KΩ ±5%	SRD1/6P			R804LR	0113607	CF 470Ω ±5%	SRD1/6P								
R414	0113651	CF 33KΩ ±5%	SRD1/6P			R805LR	0113649	CF 27KΩ ±5%	SRD1/6P								
R415	0113655	CF 47KΩ ±5%	SRD1/6P			R806LR	0113677	CF 390KΩ ±5%	SRD1/6P								
R416	0113651	CF 33KΩ ±5%	SRD1/6P			R807LR	0113641	CF 12KΩ ±5%	SRD1/6P								
R417LR	0113623	CF 2.2KΩ ±5%	SRD1/6P			R808LR	0113631	CF 4.7KΩ ±5%	SRD1/6P								
R418LR	0113633	CF 5.6KΩ ±5%	SRD1/6P			R809LR	0113639	CF 10KΩ ±5%	SRD1/6P								
R419LR	0113635	CF 6.8KΩ ±5%	SRD1/6P			R810LR	0113639	CF 10KΩ ±5%	SRD1/6P								
R420LR	0113579	CF 33Ω ±5%	SRD1/6P			R811LR	0113641	CF 12KΩ ±5%	SRD1/6P								
R421LR	0113683	CF 680KΩ ±5%	SRD1/6P														
						R812LR	0113625	CF 2.7KΩ ±5%	SRD1/6P								
						R813LR	0113637	CF 8.2KΩ ±5%	SRD1/6P								
						R814LR	0113637	CF 8.2KΩ ±5%	SRD1/6P								
						R815LR	0113629	CF 3.9KΩ ±5%	SRD1/6P								
						R816LR	0113633	CF 5.6KΩ ±5%	SRD1/6P								
						R817LR	0113625	CF 2.7KΩ ±5%	SRD1/6P								
						R818LR	0113637	CF 8.2KΩ ±5%	SRD1/6P								
						R819LR	0113629	CF 3.9KΩ ±5%	SRD1/6P								
						R820	0113611	CF 680Ω ±5%	SRD1/6P								
						R821LR	0113623	CF 2.2KΩ ±5%	SRD1/6P								
		</															

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]	27	4578976	3 φ x 20 BT bind head screw (power transformer)
L157	2137684	Choke coil [except H, HC]	CABINET			28	2589101	TN-21 mechanism ass'y
L401LR	2227991	Choke coil	1	4577816	3 φ x 20 BT screw (rear case, speaker box)	29	3305881	Cassette button
T101	2154962	FM IF transformer	2	86994082	3 φ x 8 BT bind head screw (rear case)	30	4474391	REC lever
T201	2154952	AM IF transformer	3	4042251	Front case ass'y [for H, HC]	31	4833465	Special screw (REC lever)
T202	2154964	FM IF transformer		4042252	Front case ass'y [for E, E(BS)]	32	4042321	Buffel plate ass'y
T203	2154951	AM IF transformer		4042253	Front case ass'y [for W, AU, W(UN)]	33	3804281	Speaker box (R)
T401	2136891	REC OSC transformer				34	3804291	Speaker box (L)
MISCELLANEOUS			4	3804201	Cassette door (R) (TAPE 2)	35	2403476	Speaker (12 cm)
J401LR	2678152	2P pin jack	5	3804211	Cassette door (L) (TAPE 1)	36	2403351	Tweeter
J501	2678761	Stereo jack	6	4042311	Tuning knob ass'y	37	2712262	Speaker cord [for H]
J601	2678282	DC jack [for W, W(UN)]	7	3804231	Pointer		2712261	Speaker cord [except H]
	2737441	Mic. jack	8	3804231	Gear	38	4578972	3 φ x 10 BT flange screw (speaker)
BPF101	2137191	FM band pass filter	9	3391621	Door spring	△39	2706593	Power supply cord [for H]
CF201	2135321	Ceramic filter	10	3950381	Damper ass'y	△	2702711	Power supply cord [for HC]
	0282311	Variable capacitor (CV101, CV102, CV151, CV152, CT101, CT102, CT152, CT155) [for H, HC]	11	07413082	2.6 φ x 8 bind screw (gear)			
	0282341	Variable capacitor (CV101, CV102, CV151, CV152, CT101, CT102, CT152, CT155) [except H, HC]	12	86914102	3 φ x 10 BT bind head screw (damper, antenna holder, antenna spring)	△40	2249711	Power transformer [for H, HC]
	0283557	Semi variable capacitor (CT151, CT153) [for E, E(BS)]	13	86994102	3 φ x 10 BT bind head screw (cassette chassis, G/E P.W.B.)	△	2249712	Power transformer [for E]
	02831132	Variable capacitor (CT153) [for W, AU, W(UN)]	14	3308121	Snap knob (FUNCTION, MODE, BAND)	△	2249713	Power transformer [for E(BS), AU]
			15	3308131	Button [OPERATE(POWER)]	△	2249714	Power transformer [for W, W(UN)]
			16	4042271	Rear case ass'y [for H]	41	8691406	3 φ x 6 BT bind head screw (IC501) [for H, HC]

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			
11	4819132	PAUSE lever spring	69	4819607	2 ϕ x 5 bind tapping screw (sub chassis, metal guide)
12	4819133	PAUSE stopper	70	4819191	2 ϕ x 6 tapping screw (PAUSE protection bracket)
13	4819100	Button lever spring	71	4819611	2 ϕ x 6 screw (head base)
14	4820215	Sub chassis	72	4819060	2 ϕ x 7 screw (P head, R/P head)
15	4819007	Button lever spring	73	4819600	Azimuth screw (head base)
16	4820217	PLAY button lever spring	74	4819202	2 ϕ x 4.5 camera screw (RC lever)
17	4832091	Leaf switch	75	4819077	Washer (1.2 ϕ x 3.8 x 0.4)
18	4819008	Actuator spring	76	4819078	Washer (1.55 ϕ x 3.8 x 0.5)
19	4819009	Auto lever	77	4832432	P washer cut (2.05 ϕ x 4 x 0.5)
20	4819000	Auto lever spring	78	4831623	Operation lever
21	4820214	Button lever spring	79	4831624	B frame
22	2789801	Leaf switch	80	4819232	Button lever shaft
23	4832522	Screw (pinch roller arm)	81	4819072	2 ϕ x 7 screw (B frame)
24	4820219	Head panel	82	4833463	B lever
25	4832451	RWD button lever	83	4833464	A lever
26	4819014	Head base	84	4833465	Special screw (A lever)
27	4832412	Sensing plate ass'y	85	4833466	Special screw (B lever)
28	4832452	FF button lever	86	4833467	Spring
29	4820221	Head panel spring	87	4833468	Collar
30	4832482	Sub plate	88	4839385	RC lever
31	4819006	PR stopper	89	4819018	MG arm
32	4819045	Screw (eject slide lever)	90	4839386	Lug plate
33	4819017	Spring	for ACCESSORIES		
34	4839372	Pinch roller arm ass'y		2667922	Siemens plug [for W, W(UN)]
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			



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