



# HITACHI

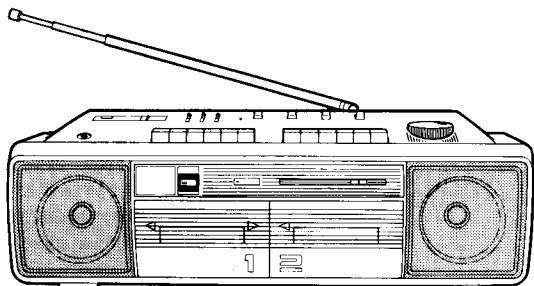
## SERVICE MANUAL

TY

No. 577 EF

**TRK-W330** [HC, E, W, AU]  
**TRK-W350** [H, HC, E(BS), W, W(UN), W(UNS), AU]

TN-21VW-987 Chassis [TRK-W330]  
 TN-521ZVW-122 Chassis [TRK-W350]



TRK-W350

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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-2bands superheterodyne [for H, HC]  
 FM/SW/MW/LW-4bands superheterodyne [for E, E(BS)]  
 FM/SW2/SW1/MW-4bands superheterodyne [for W, W(UN), W(UNS), AU]

**Sensitivity:**

FM: 15 dB (pra.)  
 10 dB (max.)  
 SW: 34 dB (pra.) [for E, E(BS)]  
 22 dB (max.) [for E, E(BS)]  
 SW2: 38 dB (pra.) [for W, W(UN), W(UNS), AU]  
 28 dB (max.) [for W, W(UN), W(UNS), AU]  
 SW1: 50 dB (pra.) [for W, W(UN), W(UNS), AU]  
 40 dB (max.) [for W, W(UN), W(UNS), AU]  
 MW(AM): 50 dB (pra.)  
 40 dB (max.)  
 LW: 55 dB (pra.) [for E, E(BS)]  
 46 dB (max.) [for E, E(BS)]

**Tuning Range:**

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

**Intermediate**

**Frequency:**

FM: 10.7 MHz  
 SW/MW/LW: 468 kHz [for E, E(BS)]  
 SW2/SW1/MW(AM): 455 kHz [except E, E(BS)]

**Antennas:**

**(Aerials)**

FM/SW/SW2: ROD. antenna  
 SW1/MW(AM)/LW: Built in ferrite antenna

**SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.**

# RADIO CASSETTE TAPE RECORDER

October 1987

YOKOHAMA WORKS

● TAPE RECORDER SECTION

<b>Tape:</b>	Cassette tape
<b>Track System:</b>	4tracks 2channels stereo
<b>Tape Speed:</b>	4.75 cm/sec.
<b>Recording System:</b>	AC bias (TAPE2)
<b>Erasing System:</b>	Magnet erase (TAPE2)
<b>Erasing Ratio:</b>	50 dB
<b>Frequency Response:</b>	Normal: 60 to 10,000 Hz
<b>Signal to Noise Ratio:</b>	40 dB
<b>Wow and Flutter:</b>	0.25% (W-RMS)
<b>Cross Talk:</b>	Between tracks: 60 dB Between channels: 40 dB
<b>Input sensitivity and impedance:</b>	CD/Line-in: 700 mV, 40 kΩ
<b>Output road impedance:</b>	Headphones: 8 to 100 Ω
<b>Distortion:</b>	3%
<b>Motor:</b>	DC micro motor
<b>Head:</b>	Permalloy

Specifications are subject to change without notice for performance improvement.

● GENERAL SECTION

<b>Semiconductors:</b>	ICs: 4 Transistors: 15 [except E, E(BS)] 16 [for E(BS)] 17 [for E] Diodes: 7 [for H, HC] 9 [except H, HC] LEDs: 2
<b>Power Supply:</b>	AC: 120V, 60 Hz [for H, HC] AC: 220V, 50 Hz [for E] AC: 240V, 50 Hz [for E(BS), AU] AC: 110 – 127V/200 – 220V/230 – 250V, 50/60 Hz [for W, W(UN), W(UNS)] DC: 9V [IEC R20 ("D" CELL) x 6 or equivalent] Car: Use car-battery adaptor [for W, W(UN), W(UNS)]
<b>Power Consumption:</b>	14W
<b>Power Output:</b>	20W P.M.P. (AC operation) 2W/CH (10% T.H.D. DC operation)
<b>Speakers:</b>	10cm (x 2)
<b>Dimensions:</b>	512 (W) x 162 (H) x 194 (D) mm
<b>Weight:</b>	3.7 kg (with batteries)

PRÉCAUTIONS DE SÉCURITÉ

Les précautions suivantes doivent être observées chaque fois qu'une réparation doit être faite.

1. Etant donné que de nombreux composants de l'appareil possèdent des caractéristiques relatives à la sécurité, utiliser uniquement des pièces de rechange d'origine Hitachi pour effectuer un remplacement. Ceci se rapporte notamment aux pièces critiques du bloc d'alimentation qui ne doivent en aucun cas être remplacées par celles d'autres fabricants. Les pièces critiques sont accompagnés du symbole  $\triangle$  dans le plan de circuit et sur le plan de base.
2. Avant de retourner l'appareil répare au client le technicien doit procéder à un essai complet pour s'assurer qu'il ne présente aucun danger de chocs électriques.

CARACTÉRISTIQUES TECHNIQUES

● SECTION RADIO

<b>Système de circuit:</b>	2 gammes d'ondes FM/AM à superhétérodyne [pour H, HC] 4 gammes d'ondes FM/OC/PO/GO à superhétérodyne [pour E, E(BS)] 4 gammes d'ondes FM/OC2/OC1/PO à superhétérodyne [pour W, W(UN), W(UNS), AU]	OC1: 50 dB (utile) [pour H, HC, W, W(UN), W(UNS), AU] 40 dB (max.) [pour H, HC, W, W(UN), W(UNS), AU] PO(AM): 50 dB (utile) 40 dB (max.) GO: 55 dB (utile) [pour E, E(BS)] 46 dB (max.) [pour E, E(BS)] FM/OC/OC2: antenne tige (aérien) OC1/PO(AM)/GO: antenne en ferrite incorporée (aérien)
<b>Gammes d'accord:</b>	FM: De 88 à 108 MHz [sauf E, E(BS)] FM: De 87,5 à 108 MHz [pour E, E(BS)] OC: De 6 à 18 MHz [pour E, E(BS)] OC2: De 7 à 22 MHz [pour W, W(UN), W(UNS), AU] OC1: De 2,3 à 7 MHz [pour W, W(UN), W(UNS), AU] PO(AM): De 530 à 1605 kHz GO: De 150 à 285 kHz [pour E, E(BS)]	<b>Antennes:</b> (aériens)
<b>Fréquence intermédiaire:</b>	FM: 10.7 MHz OC/PO/GO: 468 kHz [pour E, E(BS)] OC2/OC1/PO(AM): 455 kHz [sauf E, E(BS)]	
<b>Sensibilité:</b>	FM: 15 dB (utile) 10 dB (max.) OC: 34 dB (utile) [pour E, E(BS)] 22 dB (max.) [pour E, E(BS)] OC2: 38 dB (utile) [pour H, HC, W, W(UN), W(UNS), AU] 28 dB (max.) [pour H, HC, W, W(UN), W(UNS), AU]	<b>● SECTION LECTEUR-ENREGISTREUR DE CASSETTE</b>
		<b>Bande:</b> En cassette <b>Système de piste:</b> 4 pistes, 2 canaux stéréo <b>Vitesse de défilement:</b> 4,75 cm/s <b>Système d'enregistrement:</b> Polarisation c.a. (TAPE2) <b>Système d'effacement:</b> Aimant (TAPE2) <b>Taux déffacement:</b> 50 dB <b>Réponse en fréquence:</b> Normal: De 60 à 10000 Hz <b>Rapport signal-bruit:</b> 40 dB <b>Pleurage et scintillement:</b> 0,25% (watts effic.) <b>Diaphonie:</b> Entre les pistes: 60 dB Entre les canaux: 40 dB <b>Impédance et sensibilité d'entrée:</b> CD/entrée ligne: 700 mV, 40 kΩ

**Impédance de charge**

<b>de sortie:</b>	De 8 à 100 $\Omega$ (casque)
<b>Distortion:</b>	3%
<b>Moteur:</b>	Micro moteur CC
<b>Tête:</b>	Permalloy

110—127V/200—220V

/230—250V, 50/60 Hz

[pour W, W(UN), W(UNS)]

Courant continu: 9V [IEC R20 (pile "D")  
x 6 ou l'équivalent]

Voiture: utilisent un adaptateur

pour batterie

[pour W, W(UN), W(UNS)]

**● CARACTÉRISTIQUES GÉNÉRALES**

<b>Semi conducteurs:</b>	Circuits intégrés: 4
	Transistors: 15 [sauf E, E(BS)]
	16 [pour E(BS)]
	17 [pour E]
	Diodes: 7 [pour H, HC]
	9 [sauf H, HC]
	Diodes électroluminescentes: 2
<b>Alimentation:</b>	Secteur alternatif: 120V, 60 Hz [pour H, HC]
	220V, 50 Hz [pour E]
	240V, 50 Hz [pour E(BS), AU]

**Consommation**

<b>électrique:</b>	14W
<b>Niveau de sortie:</b>	20W PMP (fonctionnement sur le secteur)
	2W/canal (C.C. à 10% D.H.T.)
<b>Haut-parleurs:</b>	10 cm (x 2)
<b>Dimensions:</b>	512 (L) x 162 (H) x 194 (P) mm
<b>Poids:</b>	3,7 kg (piles comprises)

Les caractéristiques techniques peuvent être modifiées sans préavis pour améliorations des performances.

**DISASSEMBLY****1. Rear case (Fig. 1)**

Remove seven screws ① and remove one connector ①.

**2. Power supply P.W.B. (Fig. 1, 2)**

After removing the rear case (Fig. 1), remove two screws ②.

**3. Graphic equalizer P.W.B. (Fig. 1, 3)**

After removing the rear case (Fig. 1), remove one screw ③, release the two claws of the holder in the direction of the arrow ④ and remove the graphic equalizer P.W.B. (Note: The graphic equalizer P.W.B. is connected to the Main P.W.B. by a wire. Because the wire may be broken by pulling the P.W.B.. Be careful of this.)

**4. Main P.W.B. (Fig. 1, 3, 4)**

After removing the rear case (Fig. 1), remove the graphic equalizer P.W.B. (Fig. 3). Remove two connectors ⑤ and two more connectors ⑥ connected to the front case (cassette mechanism), as well as one connector ⑦ connected to the LED P.W.B.; release the claw in the direction of the arrow ⑧.

(Note: The Main P.W.B. is connected to the graphic equalizer P.W.B. and the headphones P.W.B. by wires. Because the wire may be broken by pulling the P.W.B.. Be careful of this.)

**5. Headphones P.W.B. (Fig. 4)**

Pull the headphones P.W.B. out in the direction of the arrow ⑨.

(Note: The headphones P.W.B. is connected to the main P.W.B. by a wire. Because the wire may be broken by pulling the P.W.B.. Be careful of this.)

**6. Cassette chassis (Fig. 1, 3, 4, 5)**

After removing everything up to the main P.W.B. via Fig. 1, 3 and 4, remove two screws ⑩, remove the holder, and remove six screws ⑪. At this time, remove eight screws ⑫ on the speakers (one each on the left and right) and remove the cassette chassis.

**7. LED P.W.B. (Fig. 1, 3, 4, 5, 6)**

After removing the cassette chassis (Fig. 1, 3, 4 and 5), remove one screw ⑬ and release three claws in the direction of the arrow ⑭.

**DÉMONTAGE****1. Boîtier arrière (Fig. 1)**

Enlever les sept vis ① et retirer le connecteur ①.

**2. Plaquette CI d'alimentation (Fig. 1, 2)**

Après avoir retiré le boîtier arrière (Fig. 1), enlever les deux vis ②.

**3. Plaquette CI d'égaliseur graphique (Fig. 1, 3)**

Après avoir retiré le boîtier arrière, enlever la vis ③, ouvrir les deux griffes du support dans la direction des flèches ④ et enlever la plaquette CI de l'égaliseur graphique.

(Remarque: La plaquette CI de l'égaliseur graphique étant reliée à la plaquette CI principale par un fil, faire très attention de ne pas couper ce fil lors du retrait de cette plaquette.)

#### 4. Plaquette CI principale (Fig. 1, 3, 4)

Après avoir retiré le boîtier arrière (Fig. 1), retirer la plaquette CI de l'égaliseur graphique (Fig. 3).

Retirer les deux connecteurs (B) et les deux connecteurs (C) connectés au boîtier avant (mécanisme de cassette), de même que le connecteur (D) connecté à la plaquette CI de LED; ouvrir la griffe dans le sens indiqué par la flèche (B).

(Remarque: La plaquette CI principale étant reliée à la plaquette CI de l'égaliseur graphique et à la plaquette CI de casque d'écoute par un fil, faire très attention de ne pas couper ce fil lors du retrait de cette plaquette.)

#### 5. Plaquette CI de casque d'écoute (Fig. 4)

Tirer la plaquette CI de casque d'écoute dans la direction de la flèche (C).

(Remarque: La plaquette CI de casque d'écoute étant reliée à la plaquette CI principale, faire très attention de ne pas couper ce fil lors du retrait de cette plaquette.)

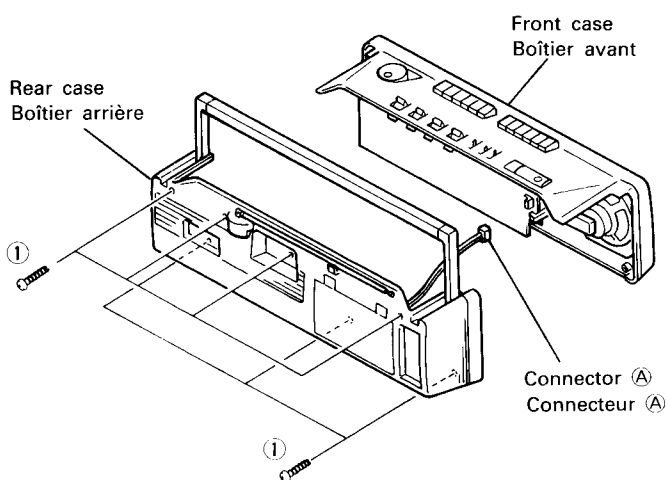


Fig. 1

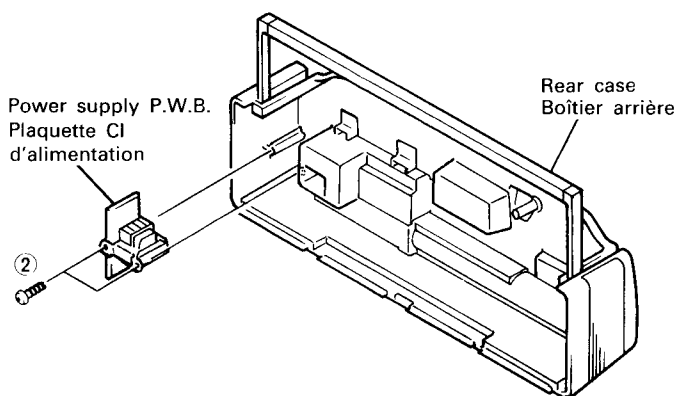


Fig. 2

#### 6 Châssis de cassette (Fig. 1, 3, 4, 5)

Après avoir effectué tous les retraits jusque et y compris la plaquette CI principale, comme indiqués aux Fig. 1, 3 et 4, enlever les deux vis (4), le support et les six vis (5). Enlever ensuite les huit vis (6) des haut-parleurs (à gauche et à droite) et retirer le châssis de cassette.

#### 7. Plaquette CI de LED (Fig. 1, 3, 4, 5, 6)

Après avoir retiré le châssis de cassette (Fig. 1, 3, 4 et 5), enlever la vis (7) et ouvrir les trois griffes dans la direction de la flèche (D).

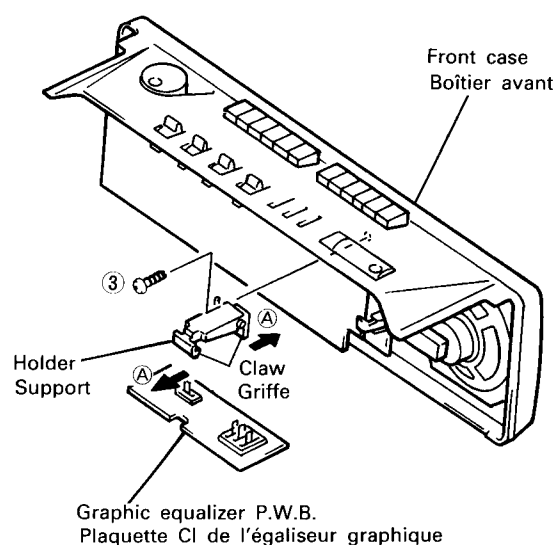


Fig. 3

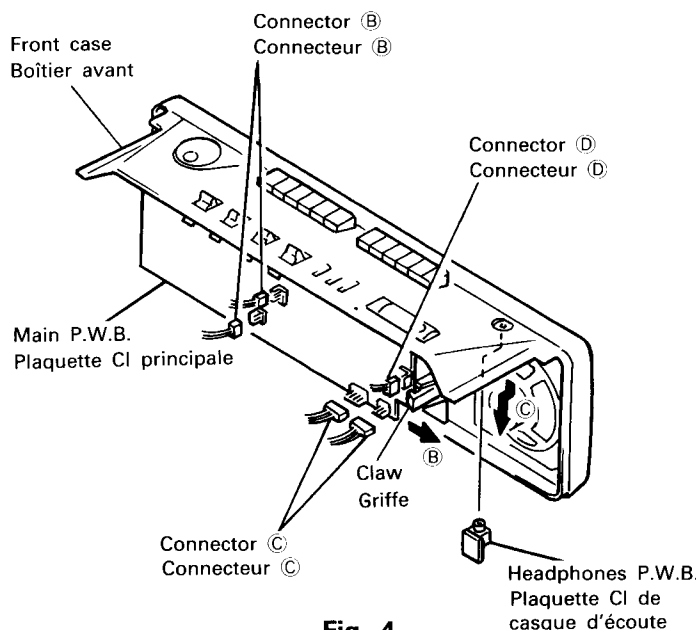


Fig. 4

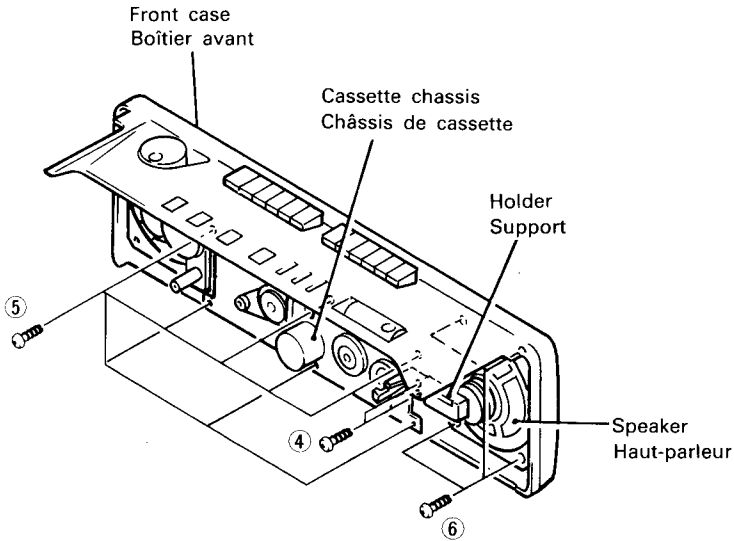


Fig. 5

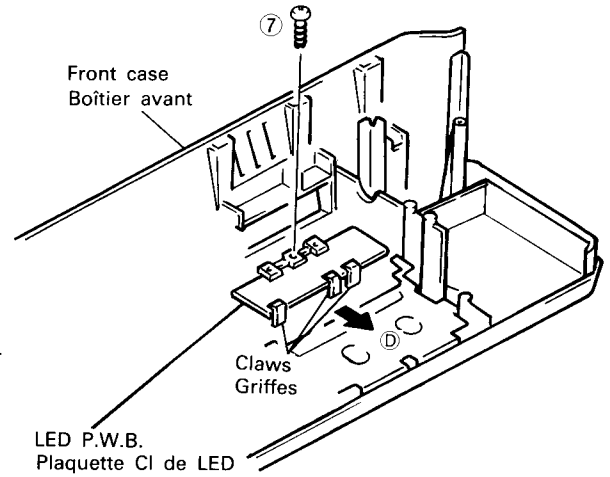


Fig. 6

## DIAL CORD STRINGING

Wind the pulley all the way counter-clockwise and string the points together in order of the numbers. After stringing, align the pointer in the setting position.

## CHEMINEMENT DU CORDON D'ACCORD

Enrouler le câble de poulie dans le sens contraire des aiguilles d'une montre et le faire passer successivement aux points indiqués. Une fois cette opération terminée, mettre le palpeur sur la position de réglage.

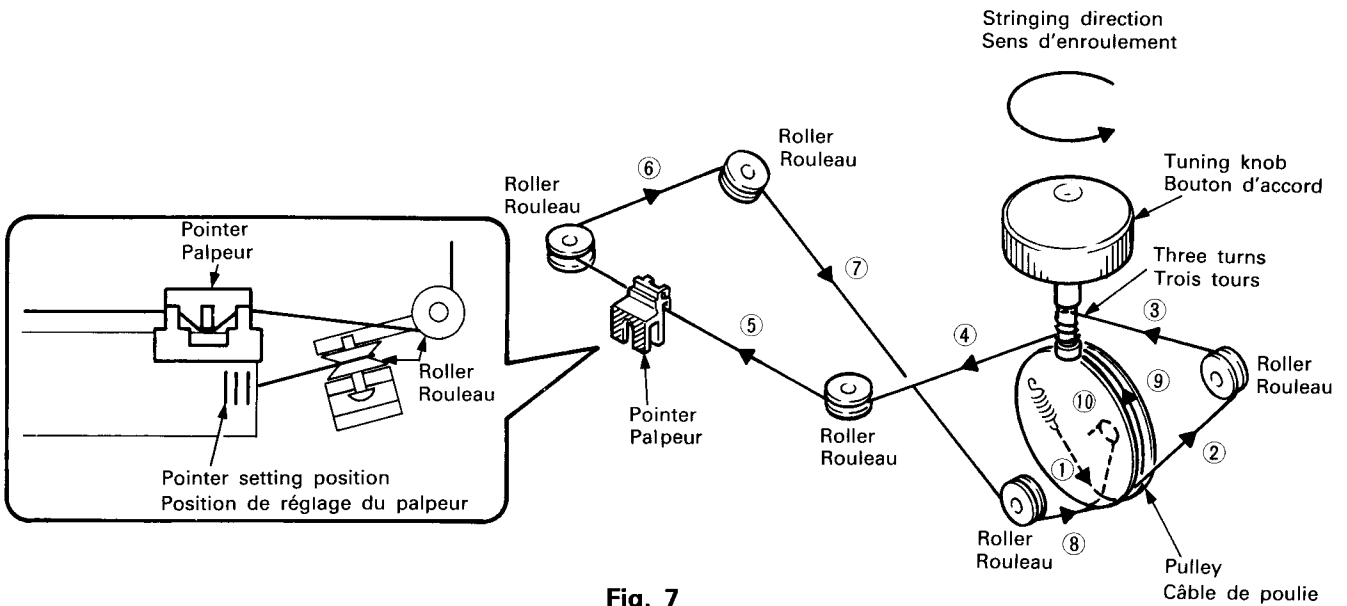


Fig. 7

# ADJUSTMENT

## 1. RADIO SECTION

● Adjustment points

[for W, W(UN), W(UNS), AU]

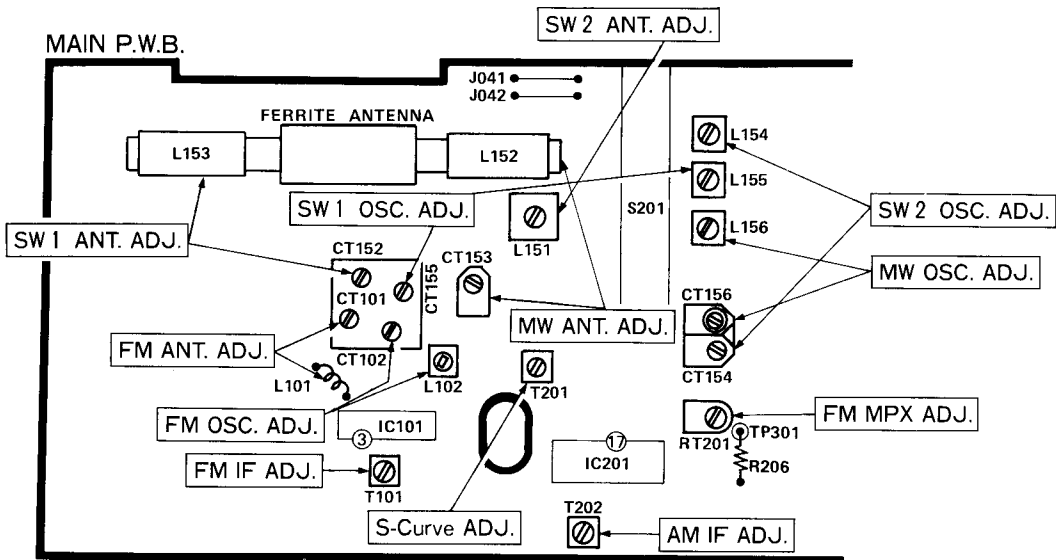


Fig. 8

(1)-1 AM Section for W, W(UN), W(UNS), AU(FM/SW2/SW1/MW 4-bands)

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	(1) AM IF	• Genescope (455 kHz)	Ferrite antenna (Note 3)	No. 17 pin of IC201	455 kHz	Highest	T202	(Note 1)
2	(1) SW2 OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.)	J(041), J(042) (through SW dummy antenna) (Note 2)	Stereo jack	6.7 MHz	Lowest	L154	Max.
					23 MHz	Highest	CT154	
					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 (400 Hz, 30% mod.)	Ferrite antenna (Note 3)	Stereo jack	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 (400 Hz, 30% mod.)	Ferrite antenna (Note 3)	Stereo jack	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 points  
[for E, E(BS)]

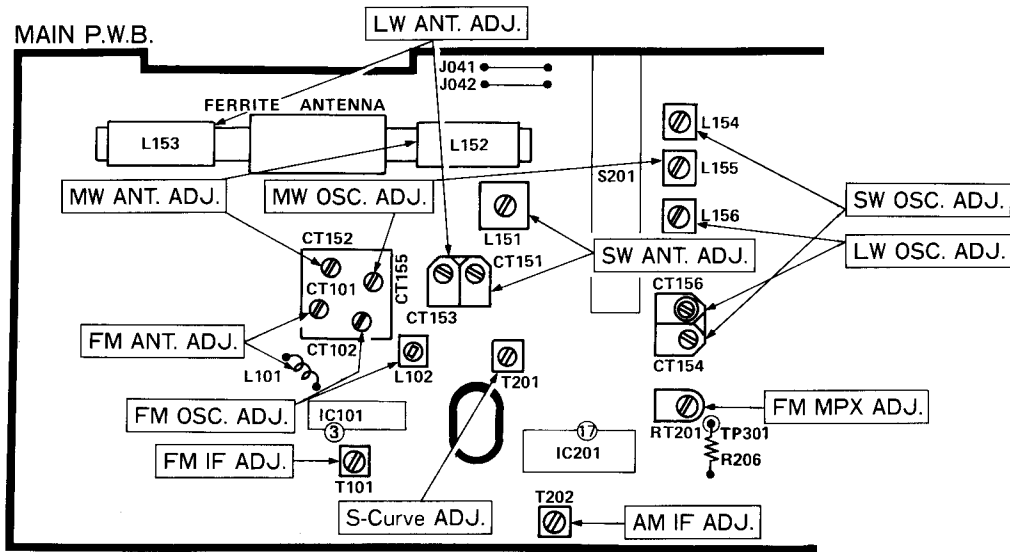


Fig. 9

(1)-2 AM Section for E, E(BS) (FM/SW/MW/LW 4-bands)

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	(1) AM IF	• Genescope (468 kHz)	Ferrite antenna (Note 3)	No. 17 pin of IC201	468 kHz	Highest	T202	(Note 1)
2	(1) SW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.)	J(041), J(042) (through SW dummy antenna) (Note 2)	Stereo jack	5.8 MHz	Lowest	L154	Max.
					18.5 MHz	Highest	CT154	
					Repeat steps (1) and (2)			
3	(1) SW ANT. (Tracking)	• VTVM • Oscilloscope	J(041), J(042) (through SW dummy antenna) (Note 2)	Stereo jack	6.5 MHz	6.5 MHz	L151	Max.
					16 MHz	16 MHz	CT151	
					Repeat steps (1) and (2)			
4	(1) MW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.)	Ferrite antenna (Note 3)	Stereo jack	515 kHz	Lowest	L155	Max.
					1,650 kHz	Highest	CT155	
					Repeat steps (1) and (2)			
5	(1) MW ANT. (Tracking)	• VTVM • Oscilloscope	Ferrite antenna (Note 3)	Stereo jack	600 kHz	600 kHz	L152	Max.
					1,400 kHz	1,400 kHz	CT152	
					Repeat steps (1) and (2)			
6	(1) LW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.)	Ferrite antenna (Note 3)	Stereo jack	145 kHz	Lowest	L156	Max.
					290 kHz	Highest	CT156	
					Repeat steps (1) and (2)			
7	(1) LW ANT. (Tracking)	• VTVM • Oscilloscope (RIF switch:B)	Ferrite antenna (Note 3)	Stereo jack	160 kHz	160 kHz	L153	Max.
					270 kHz	270 kHz	CT153	
					Repeat steps (1) and (2)			

● Adjustment points  
[for H, HC]

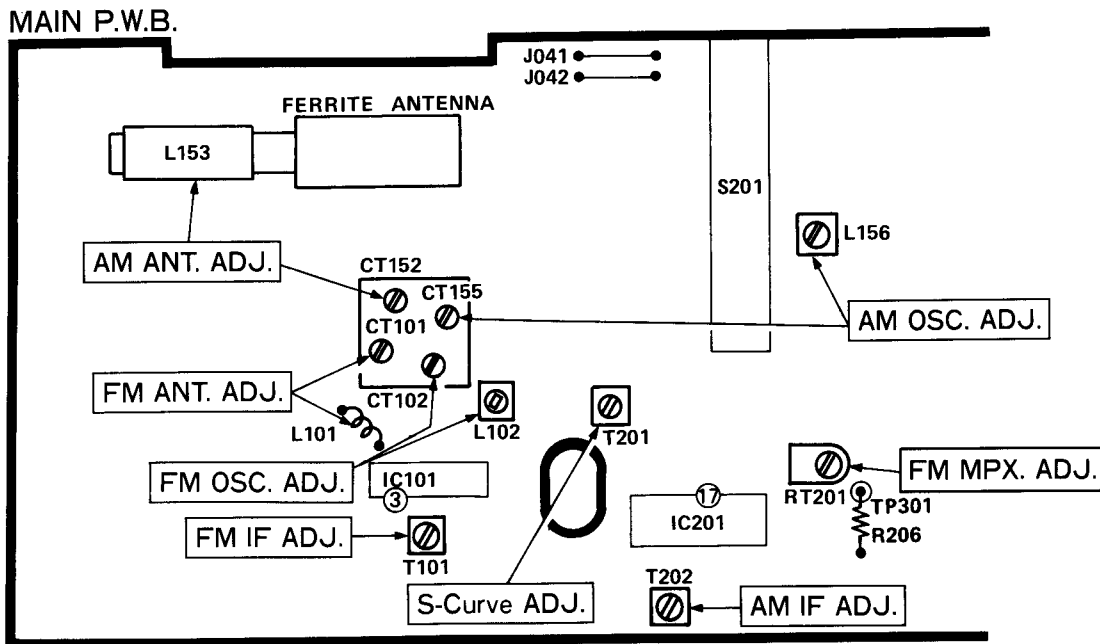


Fig. 10

(1)-3 AM Section for H, HC (FM/AM 2 bands)

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	(1) AM IF	• Genescope (455 kHz)	Ferrite antenna (Note 3)	No. 17 pin of IC201	455 kHz	Highest	T202	(Note 1)
2	(1) AM OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.)	Ferrite antenna (Note 3)	Stereo jack	515 kHz	Lowest	L156	Max.
					1,650 kHz	Highest	CT155	
					Repeat steps (1) and (2)			
3	(1) AM ANT. (Tracking)	• VTVM	Ferrite antenna (Note 3)	Stereo jack	600 kHz	600 kHz	L153	Max.
					1,400 kHz	1,400 kHz	CT152	
					Repeat steps (1) and (2)			



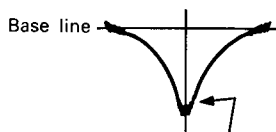
(2) FM Section

\*( ) For W. Germany and Italy

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	(1) FM IF	Turn T201 fully counterclockwise			10.7 MHz	Highest	T101	(Note 4)
	(2) S-Curve	• Genescope (10.7 MHz)	No. 3 pin of IC101	No. 17 pin of IC201			T201	(Note 5)
2	(1) FM OSC (Covering) (Note 4)	• FM signal generator (400 Hz, 30% dev.) • Oscilloscope • VTVM	J(041), J(042) (through FM dummy antenna) (Note 6)	Stereo jack	87 MHz *(87.5 MHz)	Lowest	L102	Max.
					109 MHz *(108 MHz)	Highest	CT102	
					Repeat steps (1) and (2)			
3	(1) FM ANT. (Tracking)	• VTVM	J(041), J(042) (through FM dummy antenna) (Note 6)	Stereo jack	90 MHz	90 MHz	L101	Max.
					106 MHz	106 MHz	CT101	
					Repeat steps (1) and (2)			
4	(1) FM MPX (Multiplex)	• Frequency counter	J(041), J(042) (98 MHz, 60 dB $\mu$ 0% mod. Tuning state)	TP301	—	—	RT201	75.7kHz $\pm$ 100Hz (Note 7)

Note:

1. Feed in a weak signal from the genescope. Adjust T202 for maximum gain and the waveform of Fig. 11.



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

Fig. 11

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

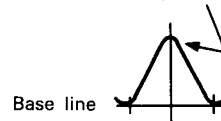


Fig. 13

2. SW dummy antenna shows Fig. 12.

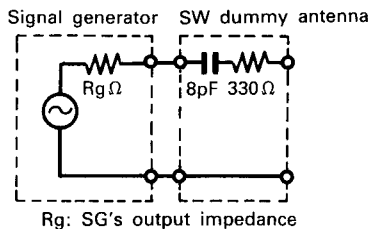


Fig. 12

5. Use the T201 core to form the S-curve shown in Fig. 14. Adjust the symmetry of A and B about point C for linearity.

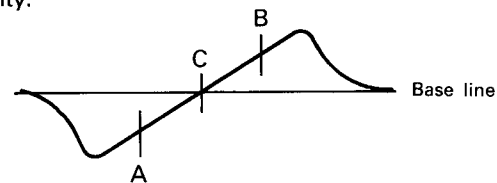


Fig. 14

6. FM dummy antenna shows Fig. 15.

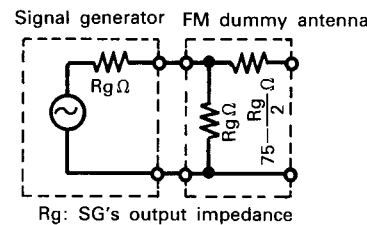


Fig. 15

7. Connect the frequency counter to TP301 and connect a 100k $\Omega$  resistor. (Please use a high input impedance frequency counter.)

2. TAPE

Perform the cleaning steps

Step	Adjustment
1	Tuning
2	Head

Note:

1. Adjust w... minutes.
2. High sp...
3. When th... rent, adj... this case... both cha... (In case

LUBRIC

Apply one o... rotating pa... Lubricate o... Do not let

MAINT

■ Clean ca... Clean off di... thinners, be... surface fini

Check t... from th... ment re

- Check... Opera... Next, both p... and th... etc. v... check... more.

## 2. TAPE RECORDER SECTION

Perform the following adjustments in the sequence stated after cleaning the head, pinch roller, and capstan with a head cleaning stick moistened in alcohol. (Note 1)

Step	Adjustment Item	Measuring Instrument and Connection			Test Tape	Mode	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	Tape speed (Note 2)	• Frequency counter	—	Stereo jack	Tape speed adjustment tape (3kHz)	Playback (TAPE 2)	RT501	3kHz±30Hz
2	Head azimuth	• VTVM	—	Stereo jack	Head azimuth adjustment tape (10kHz)	Playback	Azimuth adjusting screw. (Fig. 16)	Output max. (Note 3)

Note:

1. Adjust within 30 sec. after heat-running for more than 20 minutes.
2. High speed adjustment is not necessary.
3. 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 3 dB. (In case of W350, the difference between the maximum

values of FORWARD and REVERSE should be within 3 dB.)

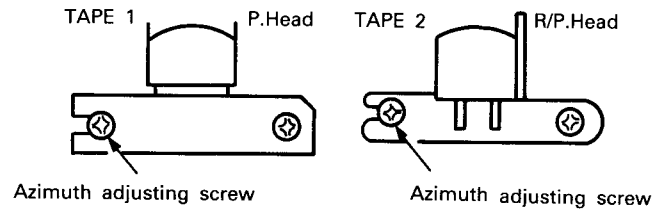


Fig. 16

## LUBRICATION

Apply one or two drops of pan motor oil or sonic slider oil to rotating parts. Coat sliding parts with Molycoat (EL-10M). Lubricate once a year or every 1,000 hours of operation. Do not let oil contact belts or idlers.

Rotating parts	Metal to metal	Pan motor oil (10W-40)
	Plastics to metal	Sonic slider oil (# 1600)
Sliding parts	(Note)	
	Plastics to plastics Plastics to metal	Molycoat (EL-10M)
Spring vibration prevention		Floyl (GB-TS-1)

NOTE:

When front frame and slide knob are replaced, coat both contacting parts lightly with white grease.

## MAINTENANCE

### ■ Clean cabinet and panels when dirty

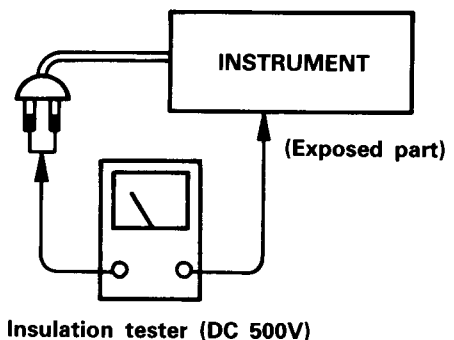
Clean off dirt on the surfaces with a dry cloth. Never use thinners, benzene or alcohol since these will damage the surface finish.

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

#### ● Checking method

Operate 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.



# RÉGLAGE

## 1. SECTION RADIO

● Points de réglage

[pour W, W(UN), W(UNS), AU]

● Points  
[pour

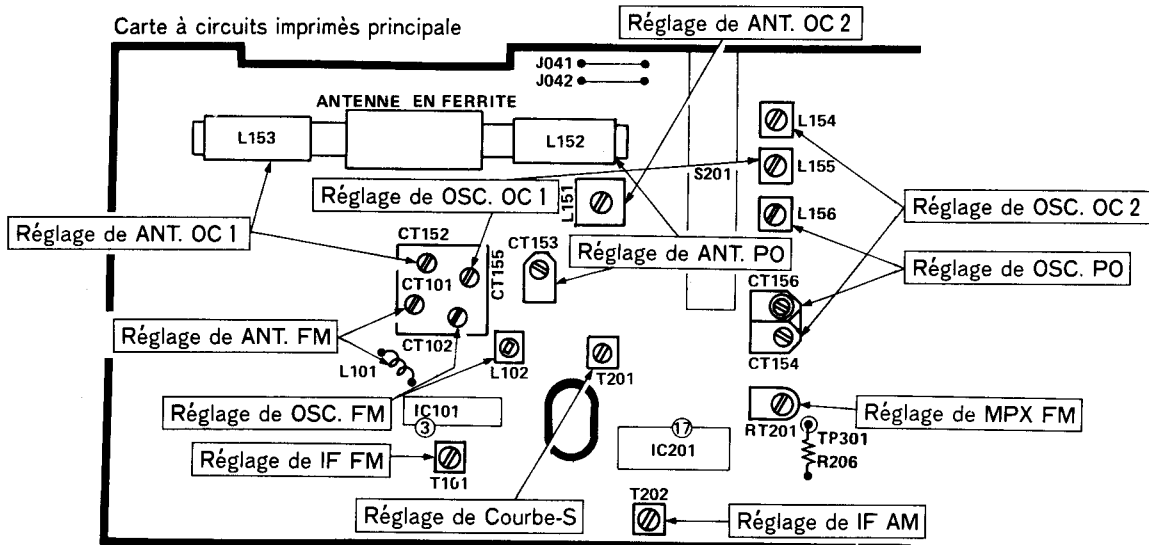


Fig. 17

### (1)-1 Section AM pour W, W(UN), W(UNS), AU (FM/OC2/OC1/PO 4 gammes)

Etape	Objet de réglage	Instrument de mesure et branchements			Généscope ou fréquence du générateur de signal	Position de l'aiguille du cadran	Réglage	Lecture
		Instrument de mesure	Borne d'entrée	Borne de sortie				
1	(1) IF AM	• Généscope (455 kHz)	Antenne en ferrite (Remarque 3)	Broche n°17 du IC201	455 kHz	La plus haute	T202	(Remarque 1)
2	(1) (2) (3) OSC. OC2 (couverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	J(041), J(042) (par le biais d'une antenne OC fictive) (Remarque 2)	Stéréo Jack	6,7 MHz	La plus basse	L154	Max.
					23 MHz	La plus haute	CT154	
					Répéter les étapes (1) et (2)			
3	(1) ANT. OC2 (poursuite)				8 MHz	8 MHz	L151	Max.
4	(1) (2) (3) OSC. OC1 (couverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	2,2 MHz	La plus basse	L155	Max.
					7,3 MHz	La plus haute	CT155	
					Répéter les étapes (1) et (2)			
5	(1) (2) (3) ANT. OC1 (poursuite)	• VTVM • Oscilloscope			2,7 MHz	2,7 MHz	L153	Max.
					6,3 MHz	6,3 MHz	CT152	
					Répéter les étapes (1) et (2)			
6	(1) (2) (3) OSC. PO (couverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	515 kHz	La plus basse	L156	Max.
					1650 kHz	La plus haute	CT156	
					Répéter les étapes (1) et (2)			
7	(1) (2) (3) ANT. PO (poursuite)	• VTVM • Oscilloscope			600 kHz	600 kHz	L152	Max.
					1400 kHz	1400 kHz	CT153	
					Répéter les étapes (1) et (2)			

### (1)-2 Section

Etape	Objet de réglage	Instrument de mesure et branchements	Généscope ou fréquence du générateur de signal	Position de l'aiguille du cadran	Réglage	Lecture
1	(1)					
2	(1) (2) (3)					
Répéter les étapes (1) et (2)						
3	(1) (2) (3)					
4	(1) (2) (3)					
Répéter les étapes (1) et (2)						
5	(1) (2) (3)					
6	(1) (2) (3)					
Répéter les étapes (1) et (2)						
7	(1) (2) (3)					

●Points de réglage  
[pour E, E(BS)]

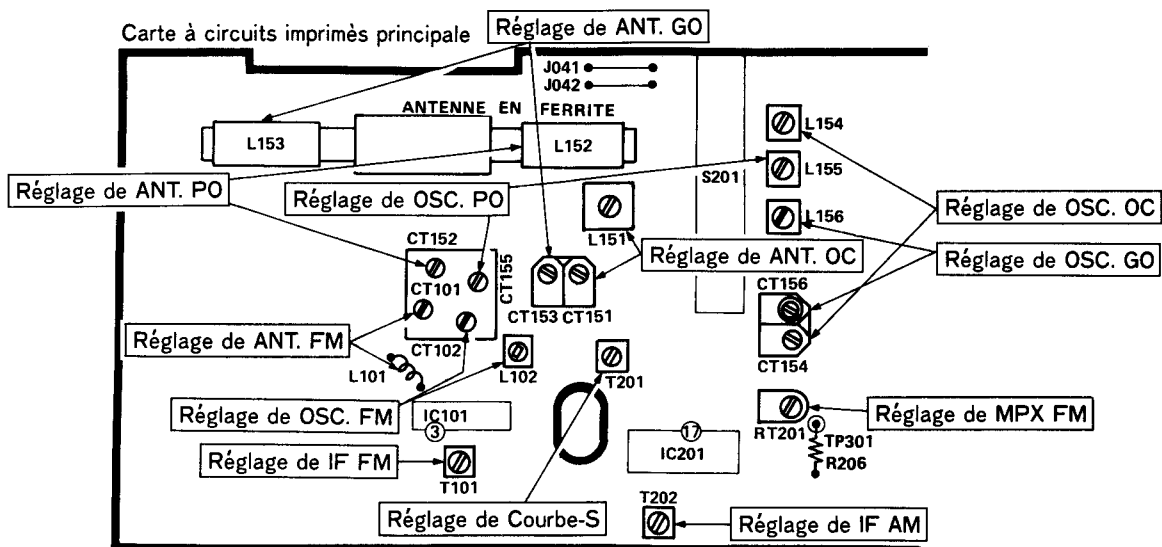


Fig. 18

(1)-2 Section AM pour E, E(BS) (FM/OC/PO/GO 4 gammes)

Lecture	Etape	Objet du réglage	Instrument de mesure et branchements			Généscope ou fréquence du générateur de signal	Position de l'aiguille du cadran	Réglage	Lecture
			Instrument de mesure	Borne d'entrée	Borne de sortie				
(Remarque 1)	1	(1) IF AM	• Généscope (468 kHz)	Antenne en ferrite (Remarque 3)	Broche n°17 du IC201	468 kHz	La plus haute	T202	(Remarque 1)
Max.	2	(1) (2) (3) OSC. OC (couverture)	• Générateur de signal AM (400 Hz, mod. 30%)	J 041, J 042 (par le biais d'une antenne OC fictive) (Remarque 2)	Stéréo Jack	5,8 MHz	La plus basse	L154	Max.
(2)						18,5 MHz	La plus haute	CT154	
Max.	3	(1) (2) (3) ANT. OC (poursuite)	• VTVM • Oscilloscope			Répéter les étapes (1) et (2)			Max.
(2)						6,5 MHz	6,5 MHz	L151	
						16 MHz	16 MHz	CT151	
Max.	4	(1) (2) (3) OSC. PO (couverture)	• Générateur de signal AM (400 Hz, mod. 30%)	Antenne en ferrite (Remarque 3)	Stéréo Jack	515 kHz	La plus basse	L155	Max.
(2)						1650 kHz	La plus haute	CT155	
Max.						Répéter les étapes (1) et (2)			
Max.	5	(1) (2) (3) ANT. PO (poursuite)	• VTVM • Oscilloscope			600 kHz	600 kHz	L152	Max.
(2)						1400 kHz	1400 kHz	CT152	
(2)						Répéter les étapes (1) et (2)			
Max.	6	(1) (2) (3) OSC. GO (couverture)	• Générateur de signal AM (400 Hz, mod. 30%)	Antenne en ferrite (Remarque 3)	Stéréo Jack	145 kHz	La plus basse	L156	
(2)						290 kHz	La plus haute	CT156	
(2)						Répéter les étapes (1) et (2)			
Max.	7	(1) (2) (3) ANT. GO (poursuite)	• VTVM • Oscilloscope			160 kHz	160 kHz	L153	
(2)						270 kHz	270 kHz	CT153	
(2)						Répéter les étapes (1) et (2)			

● Points de réglage  
[pour H, HC]

Carte à circuits imprimés principale

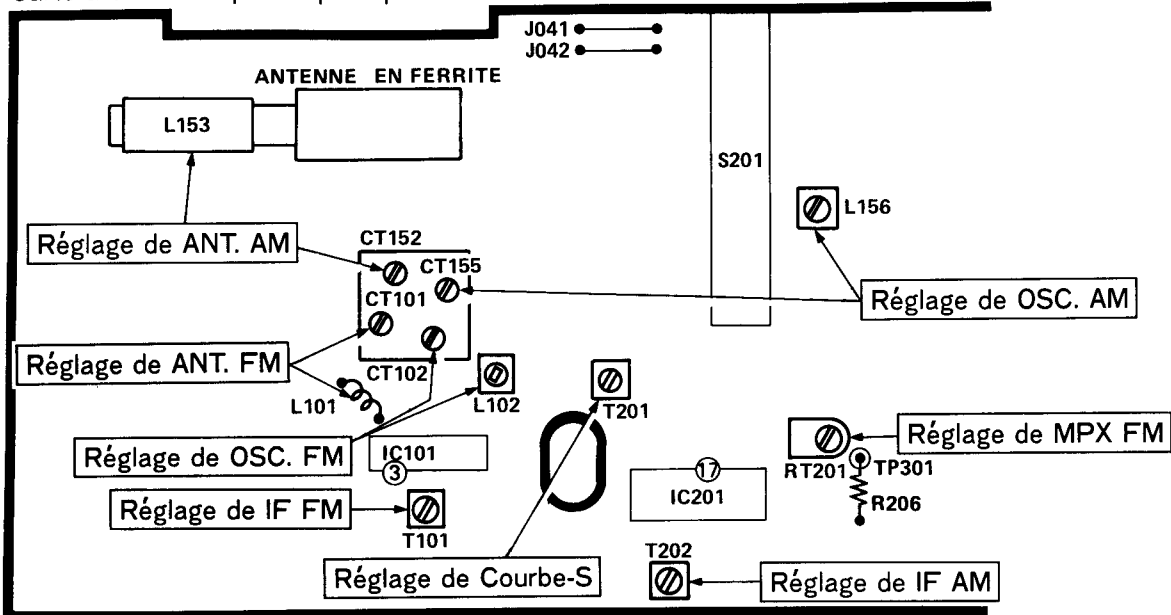


Fig. 19

(1)-3 AM Section for H, HC (FM/AM 2 bands)

Etape	Objet de réglage	Instrument de mesure et branchements			Généscope ou fréquence du générateur de signal	Position de l'aiguille du cadran	Réglage	Lecture
		Instrument de mesure	Borne d'entrée	Borne de sortie				
1	(1) IF AM	• Généscope (455 kHz)	Antenne en ferrite (Remarque 3)	Broche n°17 du IC201	455 kHz	La plus haute	T202	(Remarque 1)
2	(1) OSC. AM (couverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	515 MHz	La plus basse	L156	Max.
					1650 MHz	La plus haute	CT155	
					Répéter les étapes (1) et (2)			
3	(1) ANT. AM (poursuite)				600 kHz	600 kHz	L153	Max.
					1400 kHz	1400 kHz	CT152	
					Répéter les étapes (1) et (2)			

(2) Section

Etape	
1	(1)
	(2)
2	(1)
	(2)
	(3)
3	(1)
	(2)
	(3)
4	(1)

Remarque

1. Appliquez la tension d'alimentation afin de régler le circuit. (Fig. 2)
- Ligne

2. Antenne

3. Connectez le cadran

4. Appliquez la tension du IC201 et la fréquence d'onde pour le balancé

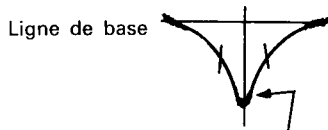
(2) Section FM

\*( ) pour la RFA et Italie.

Etape	Objet du réglage	Instrument de mesure et branchement			Généscope ou fréquence du générateur de signal	Position de l'aiguille du cadran	Réglage	Lecture
		Instrument de mesure	Borne d'entrée	Borne de sortie				
1	(1) IF FM	Tourner T201 à fond dans le sens des aiguilles d'une montre.			10,7 MHz	La plus haute	T101	(Remarque 4)
	(2) Courbe-S	• Généscope (10,7 MHz)	Broche n°3 du IC101	Broche n°17 du IC201			T201	(Remarque 5)
2	(1) OSC. FM (couverture)	• Générateur de signal FM (400 Hz, dév. 30%) • Oscilloscope • VTVM	J(041), J(042) (par le biais d'une antenne FM fictive) (Remarque 6)	Stéréo Jack	* 87 MHz (87,5 MHz)	La plus basse	L102	Max.
					* 109 MHz (108 MHz)	La plus haute	CT102	
					Répéter les étapes (1) et (2)			
3	(1) ANT. FM (poursuite)	• Oscilloscope • VTVM	J(041), J(042) (par le biais d'une antenne FM fictive) (Remarque 6)	Stéréo Jack	90 MHz	90 MHz	L101	Max.
					106 MHz	106 MHz	CT101	
					Répéter les étapes (1) et (2)			
4	(1) MPX FM (Multiplex)	• Fréquencemètre	J(041), J(042) (98 MHz, 60 dB $\mu$ 0% mod. état accord)	TP301	—	—	RT201	75,7kHz $\pm$ 100Hz (Remarque 7)

Remarque:

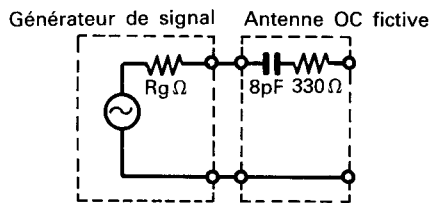
- Appliquer un signal faible du généscope. Régler T202 afin d'obtenir un gain maximum et la forme d'onde de la Fig. 20.



Régler la sortie du généscope de façon à ce qu'il y ait un peu de bruit au niveau du front d'onde.

Fig. 20

- Antenne OC fictive



Rg : impédance de sortie du générateur de signal

Fig. 21

- Connecter le générateur de signaux AM à l'antenne-cadre et l'amener près l'antenne en ferrite.

- Appliquer un signal faible du généscope sur broche n°3 du IC201. Régler T101 afin d'obtenir un gain maximum et la forme d'onde de la Fig. 22. Si le centre de la forme d'onde ne peut pas être aligné sur le marqueur, régler la balance droite/gauche.

Régler la sortie du généscope de façon à ce qu'il y ait un peu de bruit au niveau du front d'onde.

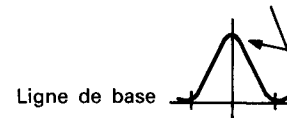


Fig. 22

- Utiliser le noyau de T201 pour former la courbe-S indiquée sur la Fig. 23. Régler la symétrie de A et B au niveau du point C pour la linéarité.

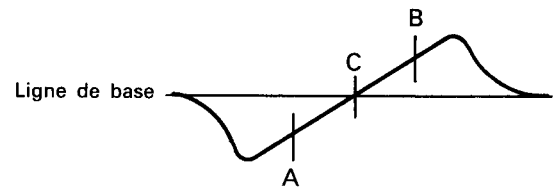
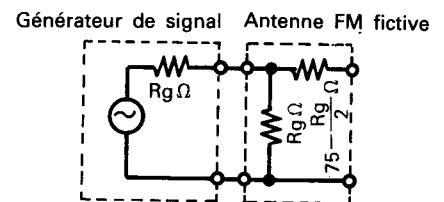


Fig. 23

- Antenne FM fictive



Rg : impédance de sortie du générateur de signal

Fig. 24

- Relier le fréquencemètre sur le TP301 et brancher une résistance de 100 k $\Omega$ . (Veuillez utiliser un fréquencemètre à haute impédance d'entrée)

## 2. SECTION LECTEUR-ENREGISTREUR DE CASSETTE

Exécuter les réglages suivants dans l'ordre indiqué après avoir nettoyé la tête, le rouleau entraîneur et le cabestan à l'aide d'une tige de nettoyage imbibé d'alcool. (Remarque 1)

Etape	Objet de réglage	Instrument de mesure et branchements			Band d'essai	Mode	Réglage	Lecture
		Instrument de mesure	Borne d'entrée	Borne de sortie				
1	Vitesse de défilement (Remarque 2)	• Fréquence-mètre	—	Stéréo Jack	Bande de réglage de vitesse de défilement (3 kHz)	Reproduction (TAPE 2)	RT501	3 kHz ± 30 Hz
2	Azimuth de tête	• VTVM	—	Stéréo Jack	Bande de réglage d'azimuth de tête (10 kHz)	Reproduction	Vis de réglage d'azimuth (Fig. 25)	Sortie max. (Remarque 3)

Remarque :

1. Régler dans une plage de 30 sec. après une mise sous tension de 20 minutes au moins.
2. Le réglage à haute vitesse n'est pas nécessaire.
3. Si les valeurs maximales des deux canaux diffèrent, régler sur la valeur maximale du canal de gauche (L). Dans ce cas, la différence entre les valeurs maximales des deux canaux doit être comprise dans une plage de 3dB.

(Dans le cas du W350, la différence entre les valeurs maximales de FORWARD et REVERSE doit être comprise dans une plage de 3dB.)

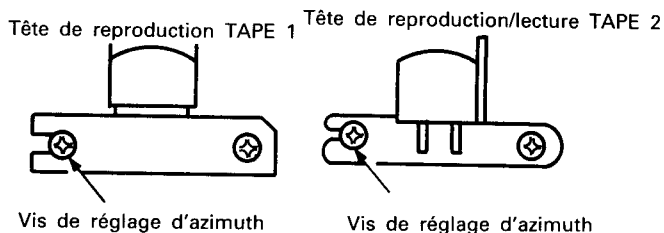


Fig. 25

## LUBRIFICATION

Appliquer une ou deux gouttes d'huile moteur ou d'huile Sonic pour curseur, sur les membres rotatifs. De la graisse Molycoat (EL-10M) est appliquée sur les membres coulissants.

Lubrifier une fois par an ou toutes les 1000 heures de fonctionnement.

Veiller à ne pas appliquer d'huile sur les courroies ou les galets.

Membres rotatifs	Entre les parties métalliques	Huile moteur (10W-40)
	Entre le moulage et les parties métalliques	Huile Sonic pour curseur (#1600)
Membres coulissants	(Remarque) Entre moulures	Molycoat (EL-10M)
	Entre moulures et pièces métalliques	
Prévention de vibration de ressort		Floyl (GB-TS-1)

Remarque:

Lorsque le châssis avant et le bouton curseur doivent être remplacés, appliquer une couche légère de graisse blanche sur les parties de contact.

## ENTRETIEN

### ■ Nettoyage du coffret et des panneaux lorsqu'ils sont sales

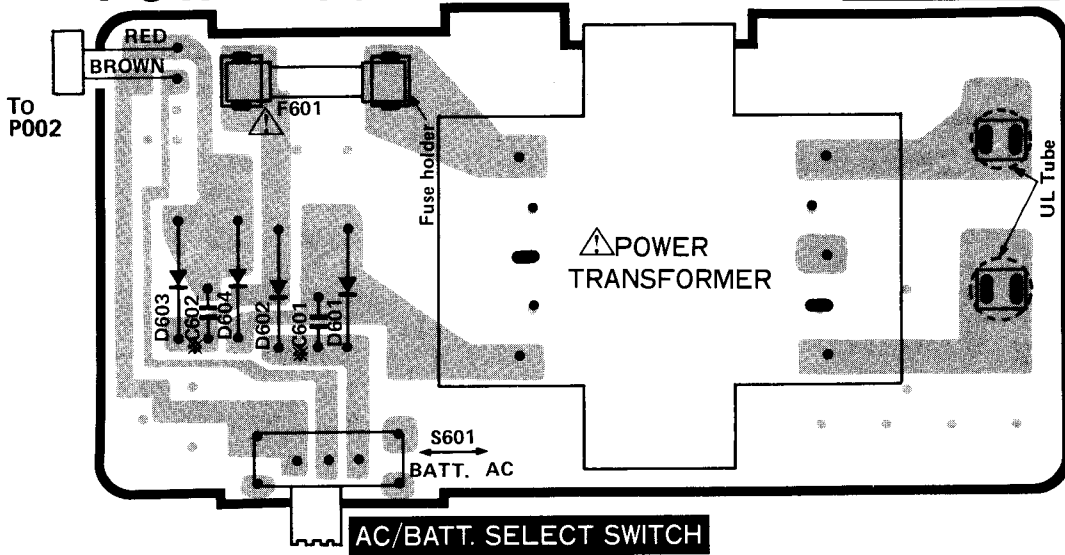
Enlever la poussière des surfaces de l'appareil avec un chiffon sec. Ne jamais utiliser de solvants, de benzine ou d'alcool car ils abîmeraient le fini des surfaces.

※ : Axial lead cylindrical ceramic capacitor.

※ : Condensateur ceramique clindrique a conducteur axial.

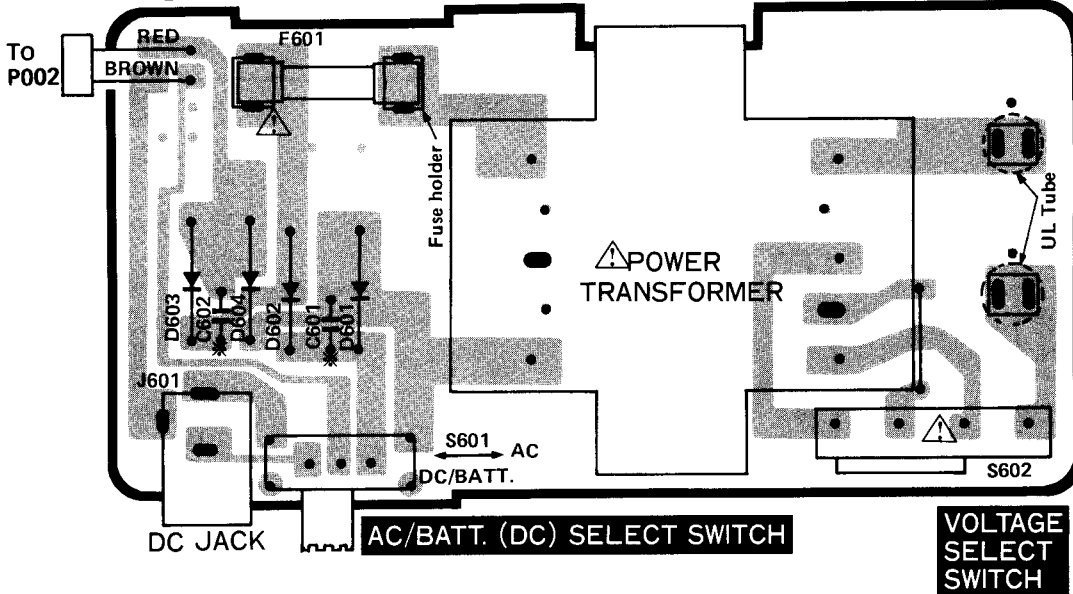
### POWER SUPPLY P.W.B.

for E, E(BS), AU



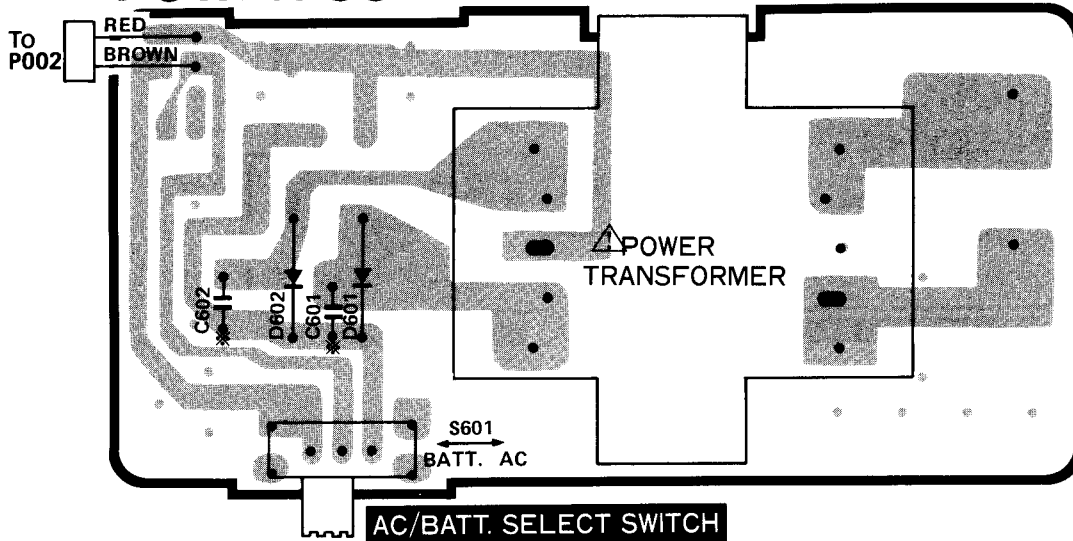
### POWER SUPPLY P.W.B.

for W, W(UN), W(UNS)

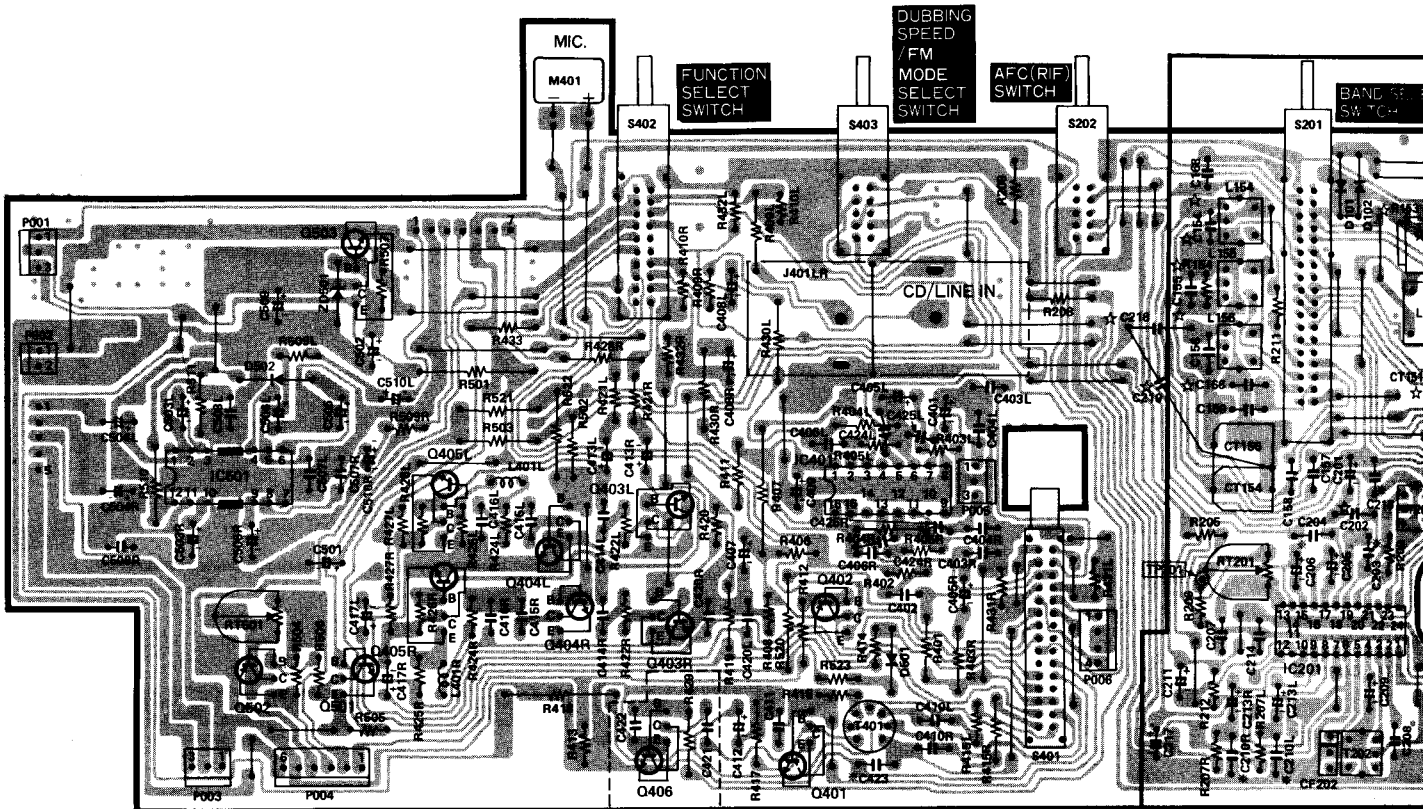


### POWER SUPPLY P.W.B.

for H, HC







RT501  
TAPE SPEED ADJ.

for E, E(BS)

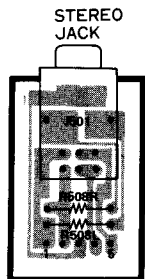
Pin No.	Voltage
1	0.9
2	1.6
3	3.8
4	0
5	0
6	3.8
7	1.8
8	3.3
9	3.8

REC PLAY  
SELECT SWITCH

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

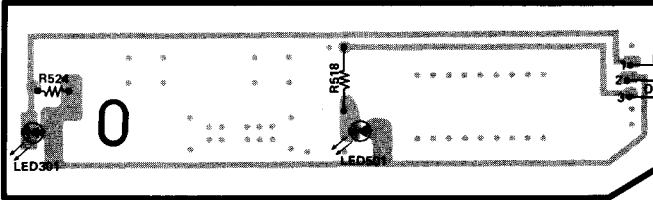
L151  
(for W, W(UN)  
SW 2 AN

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC401	4.3	2.3	4.7	2.2	2.2	2.2	2.2	0	2.2	2.2	2.2	2.2	2.2	2.2	4.3	2.2
IC501	0	4.4	8.7	0.6	0	6.4	0	0	0.6	8.7	4.4	9.0				



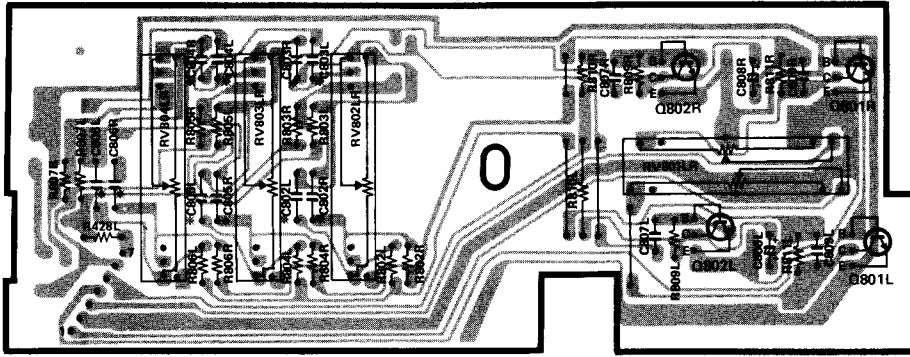
HEADPHONES  
P.W.B.

LED P.W.B.



- T101 FM IF ADJ.
- T201 S-Curve ADJ.
- L102, CT102 FM OSC. ADJ.
- L101, CT101 FM ANT. ADJ.
- RT201 FM MPX ADJ.

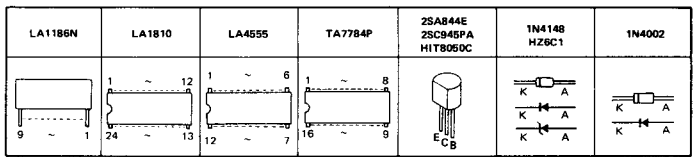
GRAPHIC EQUALIZER P.W.B.



GRAPHIC EQUALIZER CONTROL

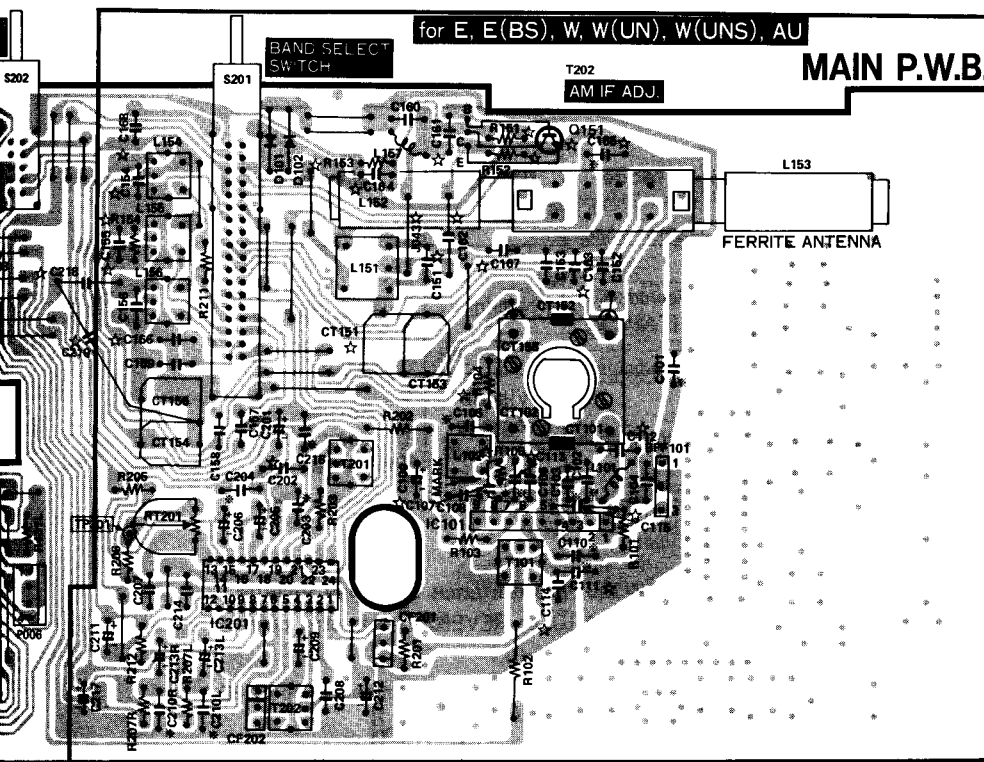
VOLUME CONTROL

	E	C	B
Q401	0	5.0	0.6
Q402	4.7	4.8	4.2
Q403LR	0	0	0
Q404LR	0	0	0.5
Q405LR	0.3	2.3	0.9
Q406	0	0	0
Q501	0	0	0.6
Q502	8.3	8.3	7.7
Q503	5.3	9.0	6.0
Q801LR	0	0	0
Q802LR	0	1.9	0.6



capacitor.  
que a conducteur axial.

The circuit symbol ( ☆ ) means difference for destination. (Refer to the table in the drawing)  
Le symbole de circuit ( ☆ ) signifie qu'il s'agit des difference pour destination. (Consulter la table dans le plan)



Q151	
E	(0.3)
C	(4.5)
B	(1.0)

IC201 ( ):AM

Pin No.	Voltage	Pin No.	Voltage
1	1.5	13	1.1 (0)
2	1.5	14	1.7
3	3.8 (4.5)	15	1.7
4	2.2 (0.5)	16	1.7
5	1.5	17	1.7
6	0	18	1.5
7	0 (3.5)	19	0.4
8	0 (4.5)	20	4.0 (4.5)
9	2.1	21	4.0 (4.5)
10	2.1	22	0 (1.5)
11	3.2 (4.5)	23	1.5
12	0.8	24	1.0 (1.5)

SYMBOL No.	E	W, W(UN), W(UNS), AU	E(BS)
Q151	○	×	×
C151	○	×	×
C155	○	×	×
C161	○	×	×
C162	○	×	×
C163	○	×	×
C164	○	×	×
C165	×	○	×
C166	○	×	×
R151	○	×	×
R152	○	×	×
R153	○	×	×
CT151	○	×	×
J043	×	○	○

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

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

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

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

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

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

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

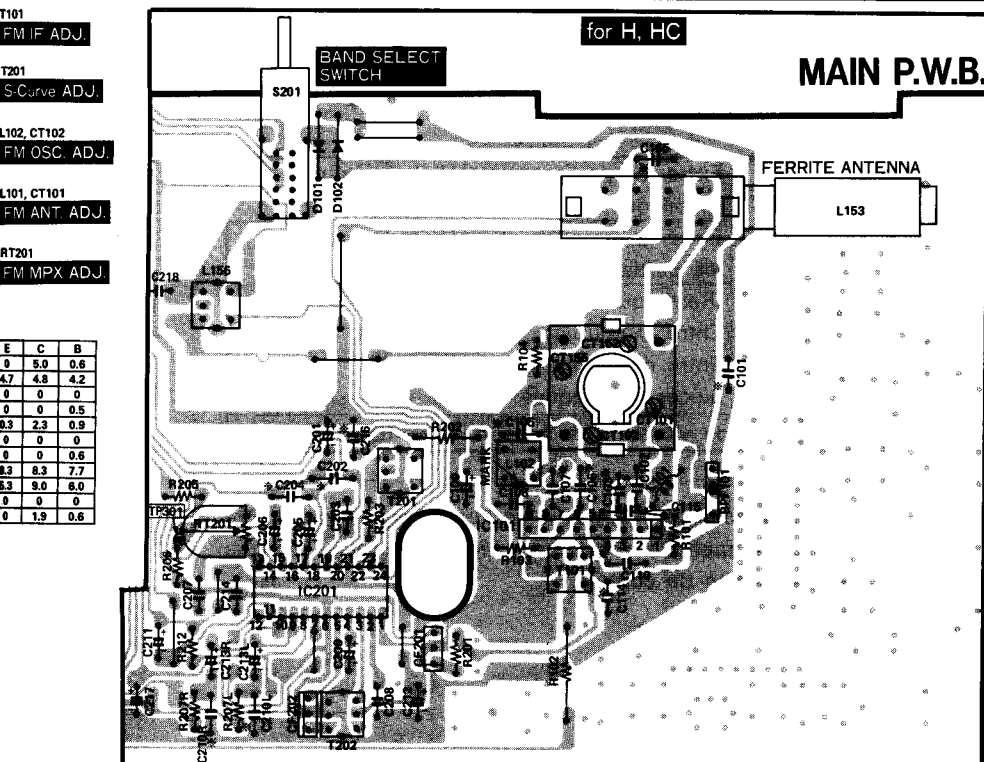
L151, CT151  
(for E, E(BS))  
SW ANT. ADJ.

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

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

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

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



SYMBOL No.	E	W, W(UN), W(UNS), AU	E(BS)
C104	○	×	○
C107, R105	×	○	○
C111	×	○	×
C112	○	×	○
C113	○	×	×
C114	○	×	○
C115	○	×	○
C154	○	×	○
C155	○	×	○
C167	○	×	○
C188	○	×	○
C218	×	○	×
C219	○	×	○
R154	×	○	×

IC101

Pin No.	Voltage
1	0.9
2	1.6
3	3.8
4	0
5	0
6	3.8
7	1.8
8	3.3
9	3.8

IC201 ( ):AM

Pin No.	Voltage	Pin No.	Voltage
1	1.5	13	1.1 (0)
2	1.5	14	1.7
3	3.8 (4.5)	15	1.7
4	2.2 (0.5)	16	1.7
5	1.5	17	1.7
6	0	18	1.5
7	0 (3.5)	19	0.4
8	0 (4.5)	20	4.0 (4.5)
9	2.1	21	4.0 (4.5)
10	2.1	22	0 (1.5)
11	3.2 (4.5)	23	1.5
12	0.8	24	1.0 (1.5)

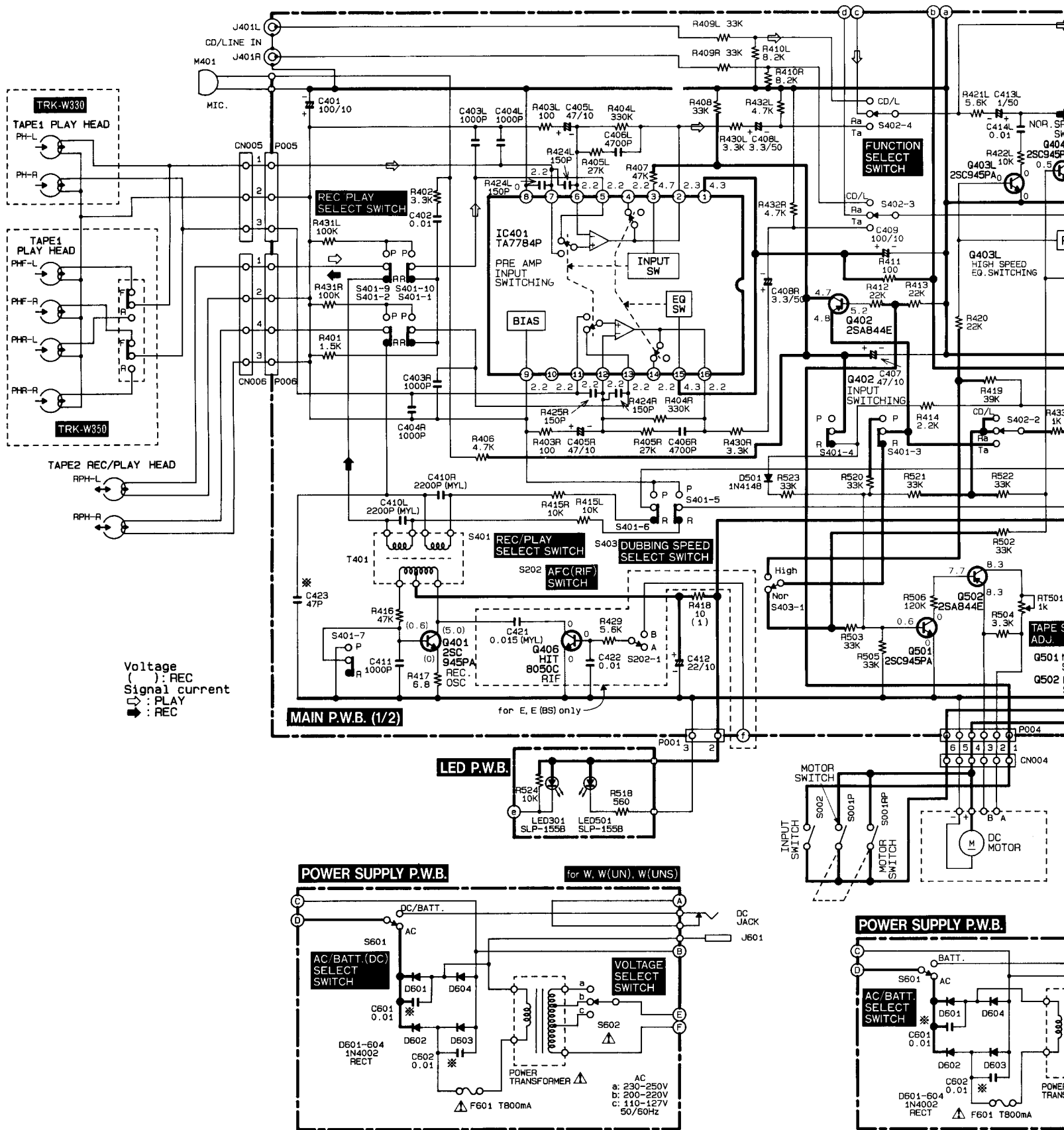
E	C	B
0	0.0	0.6
4.7	4.8	4.2
0	0	0
0	0	0.5
0.3	2.3	0.9
0	0	0
0	0	0.6
8.3	8.3	7.7
8.3	9.0	6.0
0	0	0
0	1.9	0.8

T202  
AM IF ADJ.

L156, CT155  
AM OSC. ADJ.

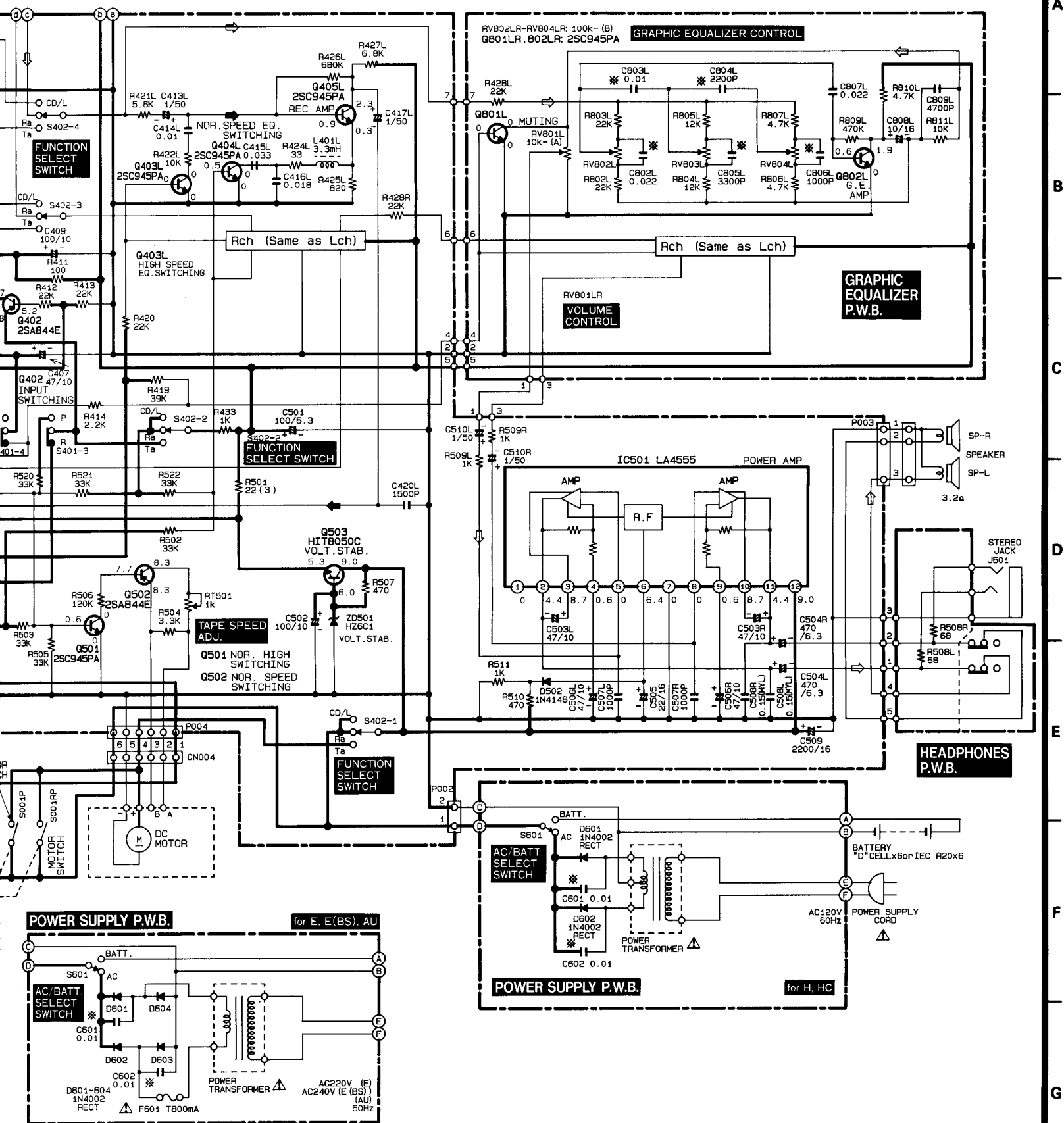
L153, CT152  
AM ANT. ADJ.

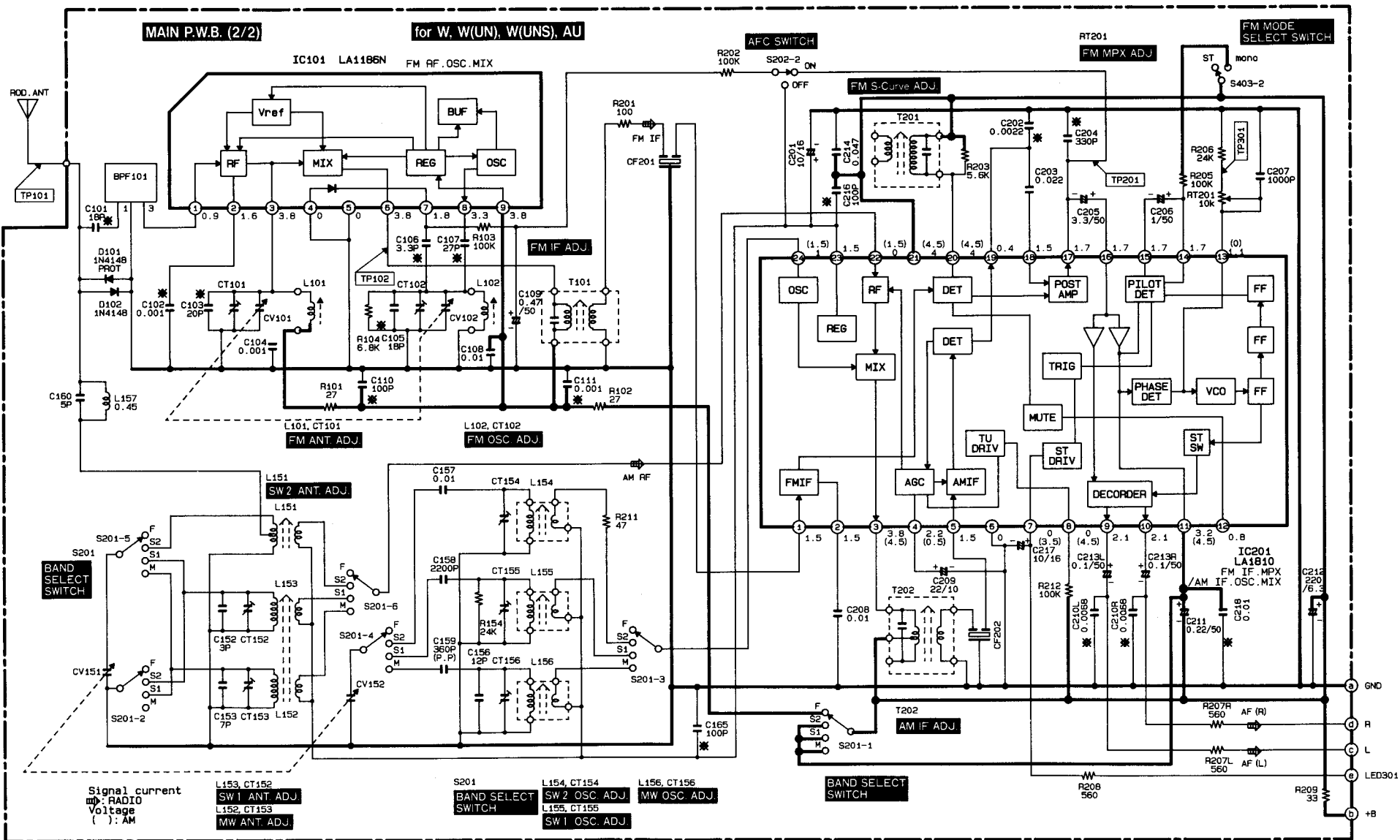
**CIRCUIT DIAGRAM · PLAN DE CIRCUIT** [ — : +B ] ※ : Axial lead cylindrical ceramic capacitor.



cylindrical ceramic capacitor.

※ : Condensateur ceramique clindrique a conducteur axial.





MAIN P.W.B. (2/2)

for W, W(UN), W(UNS), AU

MAIN P.W.B. (2/2)

for E, E(BS)

AFC SWITCH

RT201

FM MODE SELECT SWITCH

-21-

G

F

E

D

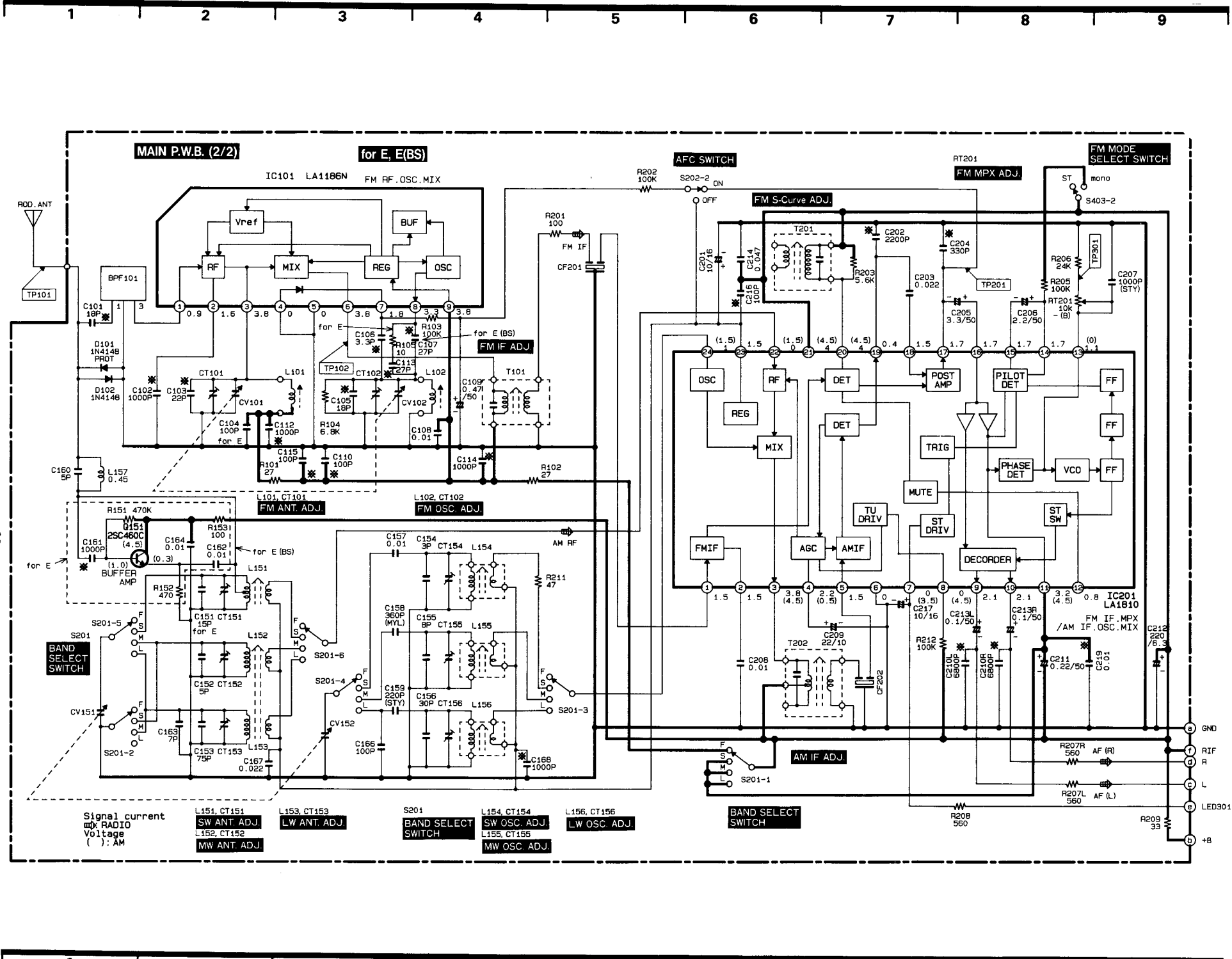
C

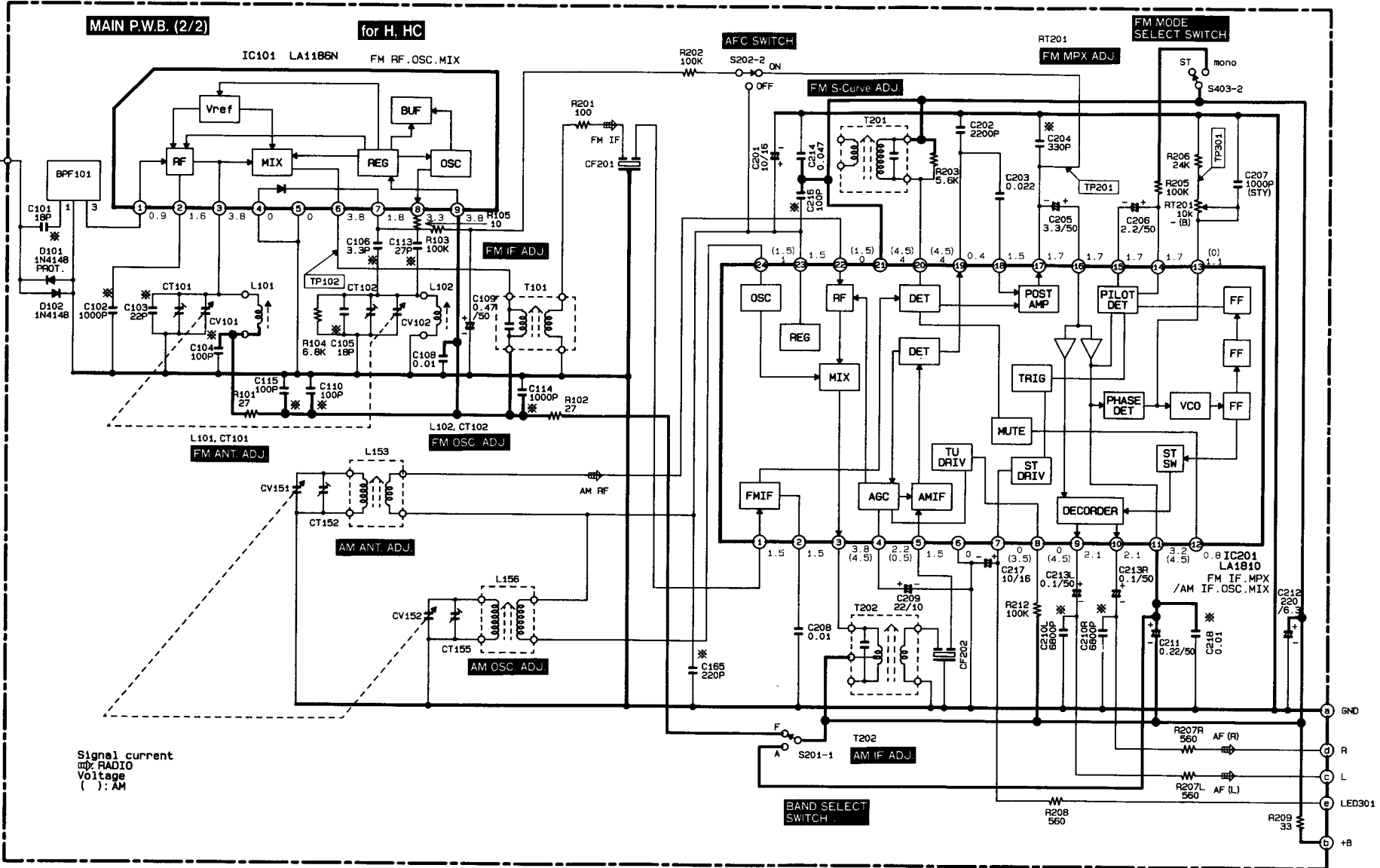
B

A

TRK-W350

TRK-W350



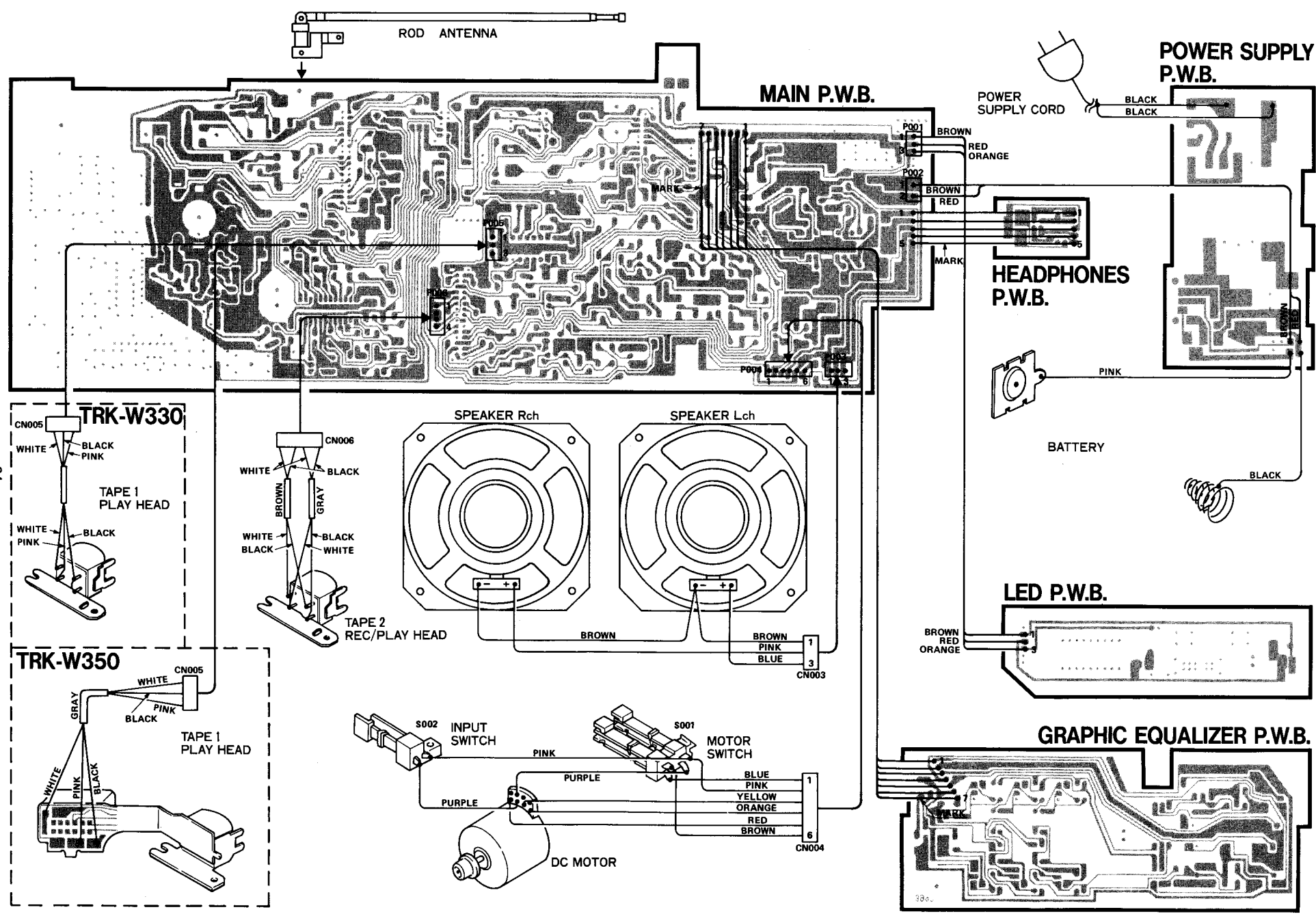


A  
B  
C  
D  
E  
F  
G

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

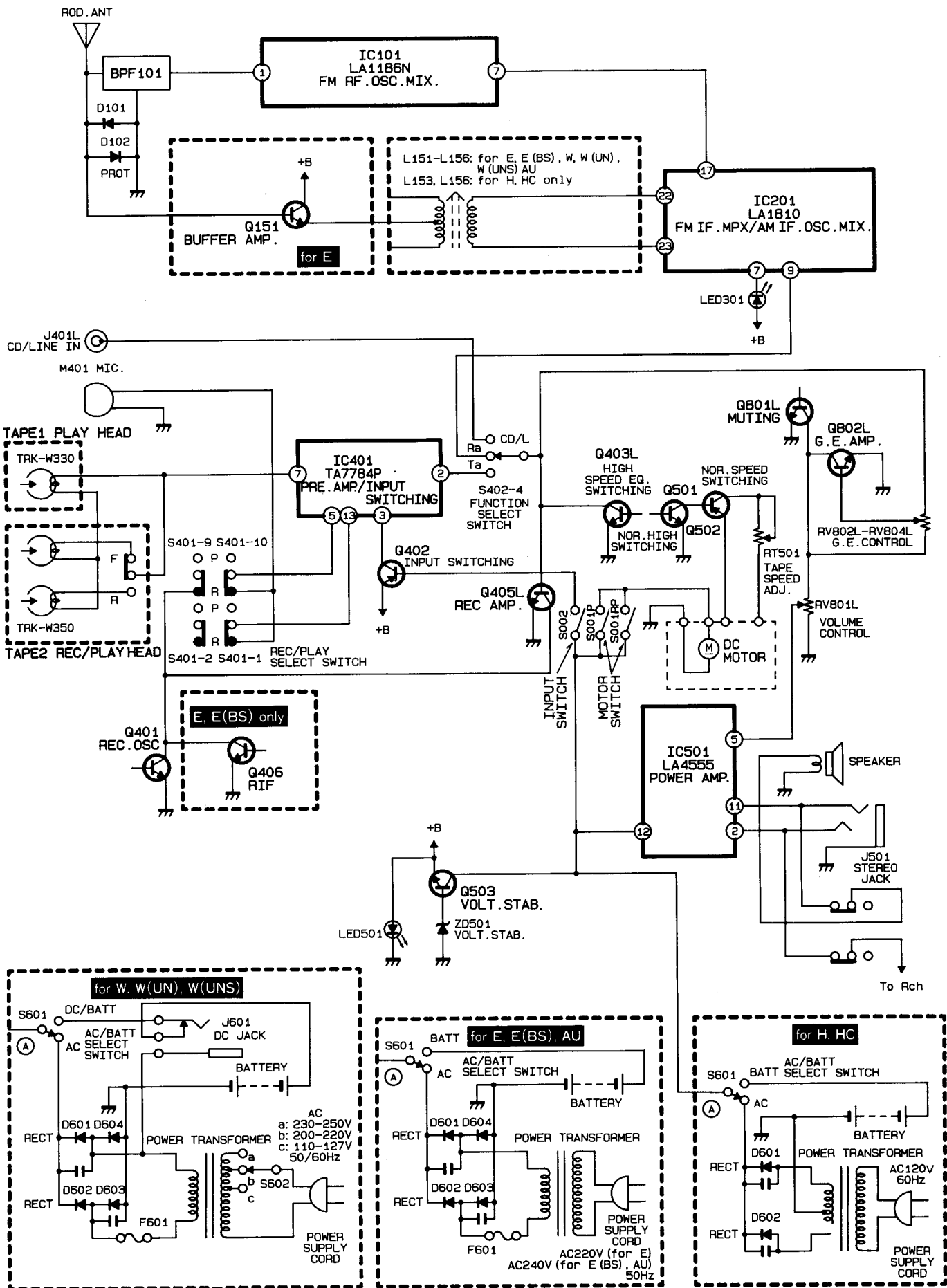
A  
B  
C  
D  
E  
F  
G



1 2 3 4 5 6 7 8 9



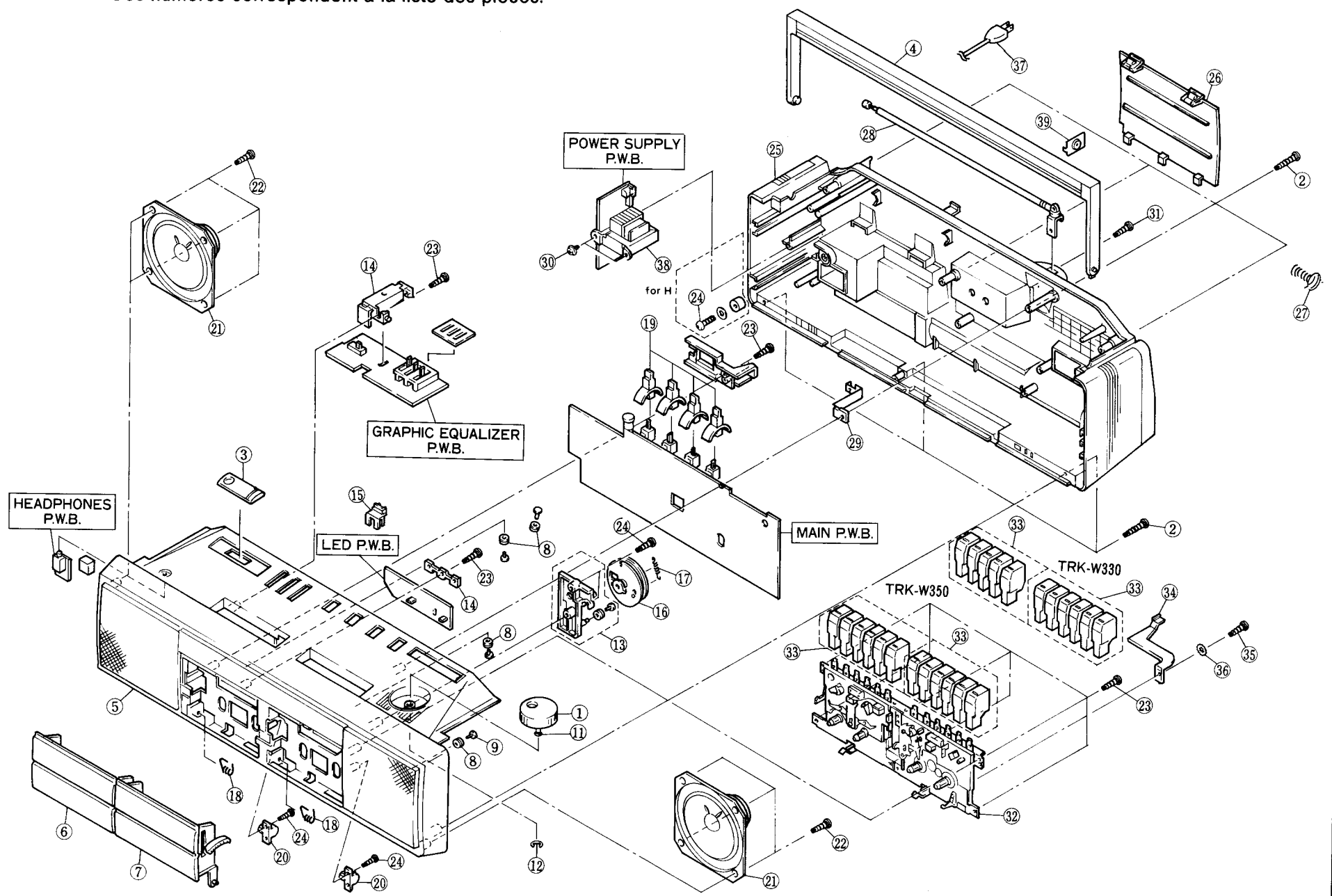
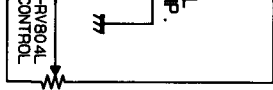
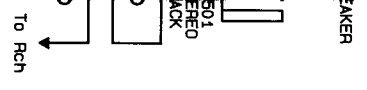
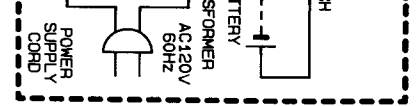
# BLOCK DIAGRAM · SCHÉMA



● Nos. are reference Nos. of parts list.  
 ● Ces numeros correspondent a la liste des pieces.

A  
B  
C  
D  
E  
F  
G

- Nos. are reference Nos. of parts list.
- Ces numeros correspondent a la liste des pièces.

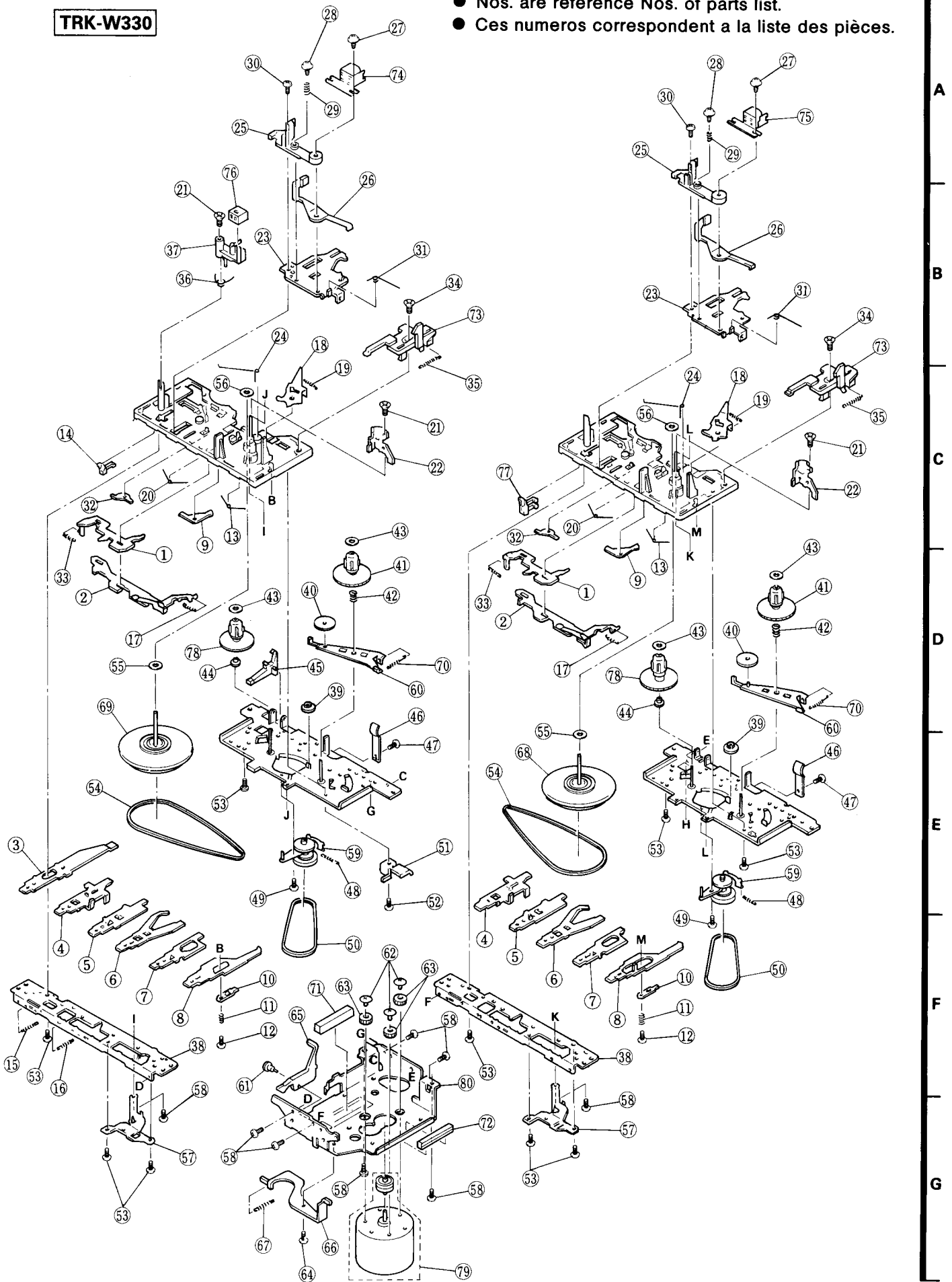


**EXPLODED VIEW · VUE EXPLOSEE**  
**(Cassette Chassis) (Châssis de Cassette)**

**TRK-W330**  
**TRK-W350**

**TRK-W330**

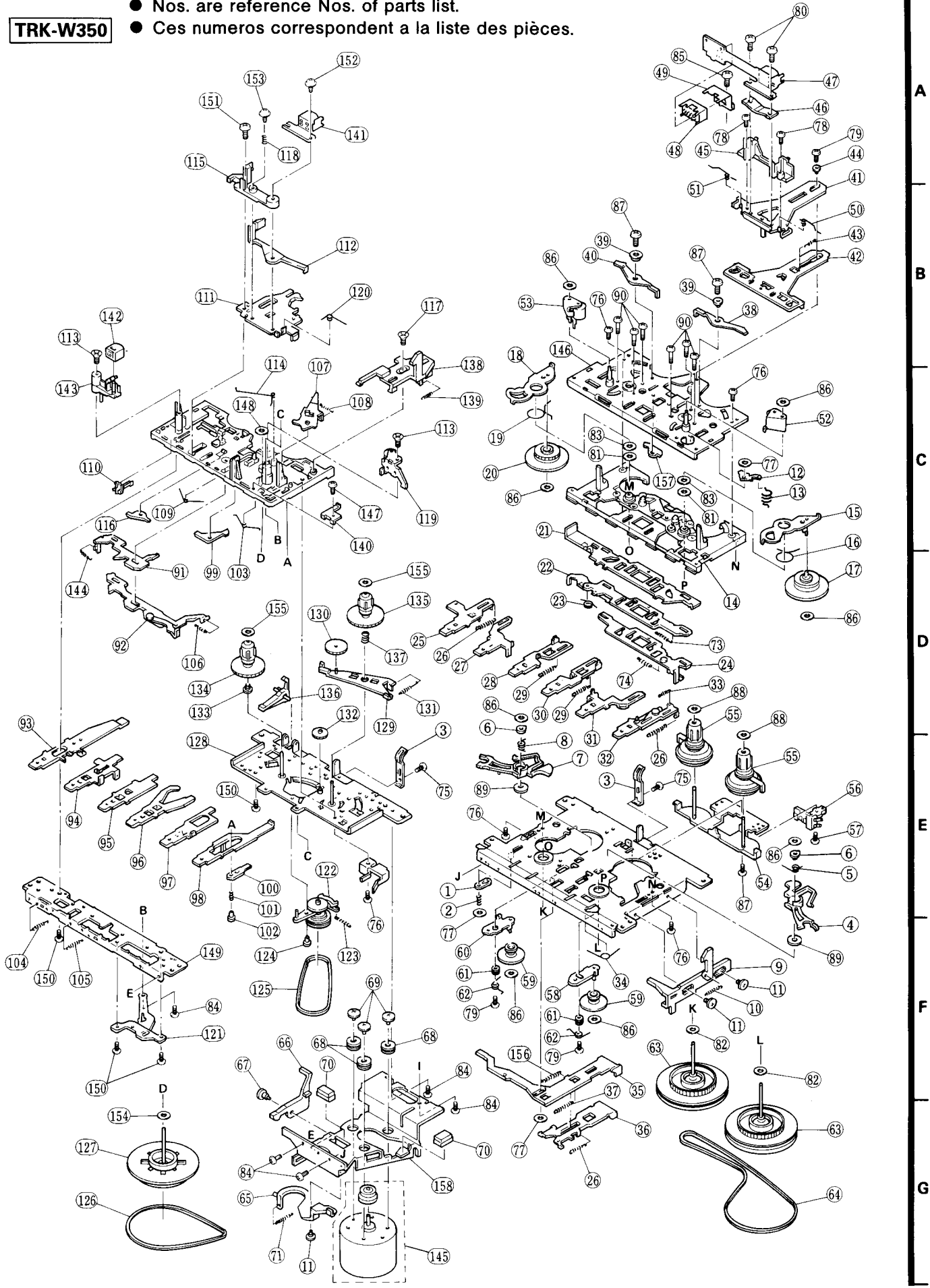
- Nos. are reference Nos. of parts list.
- Ces numeros correspondent a la liste des pièces.



# EXPLODED VIEW · VUE EXPLOSEE (Cassette Chassis) (Châssis de Cassette)

**TRK-W350**

- Nos. are reference Nos. of parts list.
- Ces numeros correspondent a la liste des pièces.



# REPLACEMENT PARTS LIST

## TABLEAU DES PIÈCES

CC: Cylindrical ceramic MO: Metal oxide  
 CD: Ceramic discal MF: Mylar film  
 CF: Carbon film ST: Styrol  
 EL: Electrolytic PP: Polypro-pylene

TRK-W330  
 TRK-W350

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
<b>CAPACITORS</b>			C163	0208647	CD 7PF ± 0.5PF 50V [for E, E(BS)]	C503LR	0252325	EL 47 µF ± 20% 10V
C101	0230618	CC 18PF ± 5% 50V	C164	0240061	CC 0.01 µF ± 30% 16V [for E]	C504LR	0252235	EL 470 µF ± 20% 6.3V
C102	0240045	CC 1000PF ± 10% 50V	C165	0240037	CC 220PF ± 10% 50V [for H, HC]	C505	0252522	EL 22 µF ± 20% 16V
C103	0208668	CD 22PF ± 5% 50V [for H, HC, E, E(BS)]	C166	0208684	CD 100PF ± 5% 50V [for AU, W, W(UN), W(UNS)]	C506LR	0252325	EL 47 µF ± 20% 10V
	0230619	CC 20PF ± 5% 50V [for AU, W, W(UN), W(UNS)]	C167	0244173	CD 0.022 µF ± 20% 50V [for E, E(BS)]	C507LR	0209161	CD 1000PF ± 80% 50V
C104	0240033	CC 100PF ± 10% 50V [for E, E(BS), H, HC]	C168	0240045	CC 1000PF ± 10% 50V [for E, E(BS)]	C508LR	0276012	MF 0.15 µF ± 10% 50V
C105	0230688	CC 18PF ± 5% 50V	C201	0252521	EL 10 µF ± 20% 16V	C509	0252542	EL 2200 µF ± 20% 16V
C106	0230646	CC 3.3PF ± 10% 50V	C202	0240053	CC 2200PF ± 20% 16V	C510LR	0252811	EL 1 µF ± 20% 50V
C107	0230622	CC 27PF ± 5% 50V [except E, H, HC]	C203	0244173	CD 0.022 µF ± 80% 50V	C601	0244171	CC 0.01 µF ± 20% 50V
C108	0244171	CD 0.01 µF ± 80% 50V	C204	0240039	CC 330PF ± 10% 50V	C602	0244171	CC 0.01 µF ± 80% 50V
C109	0252805	EL 0.47 µF ± 20% 50V	C205	0252813	EL 3.3 µF ± 20% 50V			
C110	0240033	CC 100PF ± 10% 50V	C206	0252812	EL 2.2 µF ± 20% 50V	<b>RESISTORS</b>		
C111	0240045	CC 1000PF ± 10% 50V [except E, E(BS), H, HC]	C207	0221335	ST 1000PF ± 5% 50V	R101	0113577	CF 27 Ω ± 5% SRD1/6P
C112	0240045	CC 1000PF ± 10% 50V [for E, E(BS)]	C208	0244171	CD 0.01 µF ± 80% 50V	R102	0113577	CF 27 Ω ± 5% SRD1/6P
C113	0230622	CC 27PF ± 5% 50V [for E, H, HC]	C209	0252322	EL 22 µF ± 20% 10V	R103	0113663	CF 100K Ω ± 5% SRD1/6P
C114	0240045	CC 1000PF ± 10% 50V [for E, E(BS), H, HC]	C210LR	0240059	CC 6800PF ± 30% 16V	R104	0113635	CF 6.8K Ω ± 5% SRD1/6P
C115	0240033	CC 100PF ± 10% 50V [for E, E(BS), H, HC]	C211	0252802	EL 0.22 µF ± 20% 50V	R105	0113567	CF 10 Ω ± 5% SRD1/6P [for E, H, HC]
C151	0208664	CD 15PF ± 5% 50V [for E]	C212	0252322	EL 220 µF ± 20% 6.3V	R151	0113679	CF 470K Ω ± 5% SRD1/6P
C152	0208635	CD 5PF ± 0.25PF 50V [for E, E(BS)]	C213LR	0252801	EL 0.1 µF ± 20% 50V	R152	0113607	CF 470 Ω ± 5% SRD1/6P [for E]
	0208633	CD 3PF ± 0.25PF 50V [for AU, W, W(UN), W(UNS)]	C214	0209175	CD 0.047 µF ± 80% 50V	R153	0113591	CF 100 Ω ± 5% SRD1/6P [for E]
C153	0240030	CD 75PF ± 10% 50V [for E, E(BS)]	C216	0240033	CC 100PF ± 10% 50V	R154	0113648	CF 24K Ω ± 5% SRD1/6P [for W, W(UN), W(UNS), AU]
C153	0208647	CD 7PF ± 0.5PF 50V [for AU, W, W(UN), W(UNS)]	C217	0252521	EL 10 µF ± 20% 16V	R201	0113591	CF 100 Ω ± 5% SRD1/6P
C154	0208633	CD 3PF ± 0.25PF 50V [for E, E(BS)]	C218	0240061	CC 0.01 µF ± 30% 16V [except E, E(BS)]	R202	0113663	CF 100K Ω ± 5% SRD1/6P
C155	0208648	CD 8PF ± 0.5PF 50V [for E, E(BS)]	C219	0240061	CC 0.01 µF ± 30% 16V [for E, E(BS)]	R203	0113633	CF 5.6K Ω ± 5% SRD1/6P
C156	0230614	CD 12PF ± 5% 50V [for AU, W, W(UN), W(UNS)]	C401	0252331	EL 100 µF ± 20% 10V	R205	0113663	CF 100K Ω ± 5% SRD1/6P
	0230623	CD 30PF ± 5% 50V [for E, E(BS)]	C402	0244171	CD 0.01 µF ± 80% 50V	R206	0113648	CF 24K Ω ± 5% SRD1/6P
C157	0209737	CD 0.01 µF ± 10% 50V [except H, HC]	C403LR	0209731	CD 1000PF ± 10% 50V	R207LR	0113609	CF 560 Ω ± 5% SRD1/6P
C158	0274013	MF 2200PF ± 10% 50V [for AU, W, W(UN), W(UNS)]	C404LR	0209731	CD 1000PF ± 10% 50V	R208	0113609	CF 560 Ω ± 5% SRD1/6P
	0268321	MF 360PF ± 5% 100V [for E, E(BS)]	C405LR	0252325	EL 47 µF ± 20% 10V	R209	0113579	CF 33 Ω ± 5% SRD1/6P
C159	0221319	ST 220PF ± 5% 50V [for E, E(BS)]	C406LR	0209735	CD 4700PF ± 10% 50V	R211	0113583	CF 47 Ω ± 5% SRD1/6P [except H, HC]
	0268321	PP 360PF ± 5% 100V [for AU, W, W(UN), W(UNS)]	C407	0252325	EL 47 µF ± 20% 10V	R212	0113663	CF 100K Ω ± 5% SRD1/6P
C160	0208635	CD 5PF ± 0.25PF 50V [except H, HC]	C408LR	0252813	EL 3.3 µF ± 20% 50V	R401	0113619	CF 1.5K Ω ± 5% SRD1/6P
C161	0240045	CC 1000PF ± 10% 50V [for E]	C409	0252331	EL 100 µF ± 20% 10V	R402	0113627	CF 3.3K Ω ± 5% SRD1/6P
C162	0240061	CC 0.01 µF ± 30% 16V [for E]	C410LR	0274013	MF 2200PF ± 10% 50V	R403LR	0113591	CF 100 Ω ± 5% SRD1/6P
			C411	0209731	CD 1000PF ± 10% 50V	R404LR	0113675	CF 330K Ω ± 5% SRD1/6P
			C412	0252322	EL 22 µF ± 20% 10V	R405LR	0113649	CF 27K Ω ± 5% SRD1/6P
			C413LR	0252811	EL 1 µF ± 20% 50V	R406	0113631	CF 4.7K Ω ± 5% SRD1/6P
			C414LR	0209761	CD 0.01 µF ± 20% 25V	R407	0113655	CF 47K Ω ± 5% SRD1/6P
			C415LR	0209764	CD 0.033 µF ± 20% 25V	R408	0113651	CF 33K Ω ± 5% SRD1/6P
			C416LR	0240215	CD 0.018 µF ± 20% 25V	R409LR	0113651	CF 33K Ω ± 5% SRD1/6P
			C417LR	0252811	EL 1 µF ± 20% 50V	R410LR	0113637	CF 8.2K Ω ± 5% SRD1/6P
			C420LR	0209732	CD 1500PF ± 10% 50V	R411	0113591	CF 100 Ω ± 5% SRD1/6P
			C421	0275012	MF 0.015 µF ± 10% 50V [for E, E(BS)]	R412	0113647	CF 22K Ω ± 5% SRD1/6P
			C422	0244171	CD 0.01 µF ± 80% 50V [for E, E(BS)]	R413	0113647	CF 22K Ω ± 5% SRD1/6P
			C423	0230628	CC 47PF ± 5% 50V	R414	0113623	CF 2.2K Ω ± 5% SRD1/6P
			C424LR	0248688	CD 150PF ± 5% 50V	R415LR	0113639	CF 10K Ω ± 5% SRD1/6P
			C425LR	0248688	CD 150PF ± 5% 50V	R416	0113655	CF 47K Ω ± 5% SRD1/6P
			C501	0252231	EL 100 µF ± 20% 6.3V			
			C502	0252331	EL 100 µF ± 20% 10V			

# REPLACEMENT PARTS LIST

## TABLEAU DES PIÈCES

CC: Cylindrical ceramic MO: Metal oxide  
 CD: Ceramic discal MF: Mylar film  
 CF: Carbon film ST: Styrol  
 EL: Electrolytic PP: Polypro-pylene

TRK-W350  
 TRK-W350

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
CAPACITORS			C163	0208647	CD 7PF ±0.5PF 50V [for E, E(BS)]	C503LR	0252325	EL 47 µF ±20% 10V
C101	0230618	CC 18PF ±5% 50V	C164	0240061	CC 0.01 µF ±30% 16V [for E]	C504LR	0252235	EL 470 µF ±20% 6.3V
C102	0240045	CC 1000PF ±10% 50V	C165	0240037	CC 220PF ±10% 50V [for H, HC]	C505	0252522	EL 22 µF ±20% 16V
C103	0208668	CD 22PF ±5% 50V [for H, HC, E, E(BS)]	C166	0208684	CD 100PF ±5% 50V [for E, E(BS)]	C506LR	0252325	EL 47 µF ±20% 10V
	0230619	CC 20PF ±5% 50V [for AU, W, W(UN), W(UNS)]		0240033	CC 100PF ±10% 50V [for AU, W, W(UN), W(UNS)]	C507LR	0209161	CD 1000PF ±80% 50V
C104	0240033	CC 100PF ±10% 50V [for E, E(BS), H, HC]	C167	0244173	CD 0.022 µF ±80% 50V [for E, E(BS)]	C508LR	0276012	MF 0.15 µF ±10% 50V
C105	0230688	CC 18PF ±5% 50V	C168	0240045	CC 1000PF ±10% 50V [for E, E(BS)]	C509	0252542	EL 2200 µF ±20% 16V
C106	0230646	CC 3.3PF ±10% 50V	C201	0252521	EL 10 µF ±20% 16V	C510LR	0252811	EL 1 µF ±20% 50V
C107	0230622	CC 27PF ±5% 50V [except E, H, HC]	C202	0240053	CC 2200PF ±20% 16V	C601	0244171	CC 0.01 µF ±80% 50V
C108	0244171	CD 0.01 µF ±80% 50V	C203	0244173	CD 0.022 µF ±80% 50V	C602	0244171	CC 0.01 µF ±80% 50V
C109	0252805	EL 0.47 µF ±20% 50V	C204	0240039	CC 330PF ±10% 50V	C802LR	0240066	CC 0.022 µF ±80% 25V
C110	0240033	CC 100PF ±10% 50V	C205	0252813	EL 3.3 µF ±20% 50V	C803LR	0240061	CC 0.01 µF ±30% 16V
C111	0240045	CC 1000PF ±10% 50V [except E, E(BS), H, HC]	C206	0252812	EL 2.2 µF ±20% 50V	C804LR	0240053	CC 2200PF ±20% 16V
C112	0240045	CC 1000PF ±10% 50V [for E, E(BS)]	C207	0221335	ST 1000PF ±5% 50V	C805LR	0240055	CC 3300PF ±20% 16V
C113	0230622	CC 27PF ±5% 50V [for E, H, HC]	C208	0244171	CD 0.01 µF ±80% 50V	C806LR	0240045	CC 1000PF ±10% 50V
C114	0240045	CC 1000PF ±10% 50V [for E, E(BS), H, HC]	C209	0252322	EL 22 µF ±20% 10V	C807LR	0244173	CD 0.022 µF ±80% 50V
C115	0240033	CC 100PF ±10% 50V [for E, E(BS), H, HC]	C210LR	0240059	CC 6800PF ±30% 16V	C808LR	0252521	EL 10 µF ±20% 16V
C151	0208664	CD 15PF ±5% 50V [for E]	C211	0252802	EL 0.22 µF ±20% 50V	C809LR	0209735	CD 4700PF ±10% 50V
C152	0208635	CD 5PF ±0.25PF 50V [for E, E(BS)]	C212	0252322	EL 2.2 µF ±20% 6.3V			RESISTORS
	0208633	CD 3PF ±0.25PF 50V [for AU, W, W(UN), W(UNS)]	C213LR	0252801	EL 0.1 µF ±20% 50V	R101	0113577	CF 27 Ω ±5% SRD1/6P
C153	0240030	CD 75PF ±10% 50V [for E, E(BS)]	C214	0209175	CD 0.047 µF ±80% 50V	R102	0113577	CF 27 Ω ±5% SRD1/6P
C153	0208647	CD 7PF ±0.5PF 50V [for AU, W, W(UN), W(UNS)]	C216	0240033	CC 100PF ±10% 50V	R103	0113663	CF 100K Ω ±5% SRD1/6P
C154	0208633	CD 3PF ±0.25PF 50V [for E, E(BS)]	C217	0252521	EL 10 µF ±20% 16V	R104	0113635	CF 6.8K Ω ±5% SRD1/6P
C155	0208648	CD 8PF ±0.5PF 50V [for E, E(BS)]	C218	0240061	CC 0.01 µF ±30% 16V [except E, E(BS)]	R105	0113567	CF 10 Ω ±5% SRD1/6P [for E, H, HC]
C156	0230614	CD 12PF ±5% 50V [for AU, W, W(UN), W(UNS)]	C219	0240061	CC 0.01 µF ±30% 16V [for E, E(BS)]	R151	0113679	CF 470K Ω ±5% SRD1/6P [for E]
	0230623	CD 30PF ±5% 50V [for E, E(BS)]	C401	0252331	EL 100 µF ±20% 10V	R152	0113607	CF 470 Ω ±5% SRD1/6P [for E]
C157	0209737	CD 0.01 µF ±10% 50V [except H, HC]	C402	0244171	CD 0.01 µF ±80% 50V	R153	0113591	CF 100 Ω ±5% SRD1/6P [for E]
C158	0274013	MF 2200PF ±10% 50V [for AU, W, W(UN), W(UNS)]	C403LR	0209731	CD 1000PF ±10% 50V	R154	0113648	CF 24K Ω ±5% SRD1/6P [for W, W(UN), W(UNS), AU]
	0268321	MF 360PF ±5% 100V [for E, E(BS)]	C404LR	0209731	CD 1000PF ±10% 50V	R201	0113591	CF 100 Ω ±5% SRD1/6P
C159	0221319	ST 220PF ±5% 50V [for E, E(BS)]	C405LR	0252325	EL 47 µF ±20% 10V	R202	0113663	CF 100K Ω ±5% SRD1/6P
	0268321	PP 360PF ±5% 100V [for AU, W, W(UN), W(UNS)]	C406LR	0209735	CD 4700PF ±10% 50V	R203	0113633	CF 5.6K Ω ±5% SRD1/6P
C160	0208635	CD 5PF ±0.25PF 50V [except H, HC]	C407	0252325	EL 47 µF ±20% 10V	R205	0113663	CF 100K Ω ±5% SRD1/6P
C161	0240045	CC 1000PF ±10% 50V [for E]	C408LR	0252813	EL 3.3 µF ±20% 50V	R206	0113648	CF 24K Ω ±5% SRD1/6P
C162	0240061	CC 0.01 µF ±30% 16V [for E]	C409	0252331	EL 100 µF ±20% 10V	R207LR	0113609	CF 560 Ω ±5% SRD1/6P
			C410LR	0274013	MF 2200PF ±10% 50V	R208	0113609	CF 560 Ω ±5% SRD1/6P
			C411	0209731	CD 1000PF ±10% 50V	R209	0113579	CF 33 Ω ±5% SRD1/6P
			C412	0252322	EL 22 µF ±20% 10V	R211	0113583	CF 47 Ω ±5% SRD1/6P [except H, HC]
			C413LR	0252811	EL 1 µF ±20% 50V	R212	0113663	CF 100K Ω ±5% SRD1/6P
			C414LR	0209761	CD 0.01 µF ±20% 25V	R401	0113619	CF 1.5K Ω ±5% SRD1/6P
			C415LR	0209764	CD 0.033 µF ±20% 25V	R402	0113627	CF 3.3K Ω ±5% SRD1/6P
			C416LR	0240215	CD 0.018 µF ±20% 25V	R403LR	0113591	CF 100 Ω ±5% SRD1/6P
			C417LR	0252811	EL 1 µF ±20% 50V	R404LR	0113675	CF 330K Ω ±5% SRD1/6P
			C420LR	0209732	CD 1500PF ±10% 50V	R405LR	0113649	CF 27K Ω ±5% SRD1/6P
			C421	0275012	MF 0.015 µF ±10% 50V [for E, E(BS)]	R406	0113631	CF 4.7K Ω ±5% SRD1/6P
			C422	0244171	CD 0.01 µF ±80% 50V [for E, E(BS)]	R407	0113655	CF 47K Ω ±5% SRD1/6P
			C423	0230628	CC 47PF ±5% 50V	R408	0113651	CF 33K Ω ±5% SRD1/6P
			C424LR	0248688	CD 150PF ±5% 50V	R409LR	0113651	CF 33K Ω ±5% SRD1/6P
			C425LR	0248688	CD 150PF ±5% 50V	R410LR	0113637	CF 8.2K Ω ±5% SRD1/6P
			C501	0252231	EL 100 µF ±20% 6.3V	R411	0113591	CF 100 Ω ±5% SRD1/6P
			C502	0252331	EL 100 µF ±20% 10V	R412	0113647	CF 22K Ω ±5% SRD1/6P
						R413	0113647	CF 22K Ω ±5% SRD1/6P
						R414	0113623	CF 2.2K Ω ±5% SRD1/6P
						R415LR	0113639	CF 10K Ω ±5% SRD1/6P
						R416	0113655	CF 47K Ω ±5% SRD1/6P

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
R417	0113563	CF 6.8Ω ±5% SRD1/6P	Q801LR	2329453	2SC945PA	T202	2137905	AM IF transformer
R418	1119401	MO 10Ω ±10% RS1B	Q802LR	2329453	2SC945PA	T401	2136892	REC OSC. transformer
R419	0113653	CF 39KΩ ±5% SRD1/6P	DIODES			MISCELLANEOUS		
R420	0113647	CF 22KΩ ±5% SRD1/6P	D101	2398082	1N4148	J401LR	2678781	2P pin jack
R421LR	0113633	CF 5.6KΩ ±5% SRD1/6P	D102	2398082	1N4148	J501	2678761	Stereo jack
R422LR	0113639	CF 10KΩ ±5% SRD1/6P	D501	2398082	1N4148	J601	2678282	DC jack
R424LR	0113579	CF 33Ω ±5% SRD1/6P	D502	2398082	1N4148	PVC	0282431	Capacitor variable [except H, HC]
R425LR	0113613	CF 820Ω ±5% SRD1/6P	D601	2398061	1N4002		0282282	Capacitor variable [for H, HC]
R426LR	0113683	CF 680KΩ ±5% SRD1/6P	D602	2398061	1N4002	CT151-153	0283557	Capacitor semi variable [for E, E(BS)]
R427LR	0113635	CF 6.8KΩ ±5% SRD1/6P	D603	2398061	1N4002	CT153	0283113	Capacitor variable [for AU, W, W(UN), W(UNS)]
R428LR	0113647	CF 22KΩ ±5% SRD1/6P	D604	2398061	1N4002	CT154	0283113	Capacitor variable [for E, E(BS)]
R429	0113633	CF 5.6KΩ ±5% SRD1/6P [for E, E(BS)]	ZD501	2337517	HZ6C1	CT154-156	0283557	Capacitor semi variable [for AU, W, W(UN), W(UNS)]
R430LR	0113627	CF 3.3KΩ ±5% SRD1/6P	LED301	2338831	SLP-155B	CT156	0283191	Capacitor trimmer [for E, E(BS)]
R431LR	0113663	CF 100KΩ ±5% SRD1/6P	LED501	2338831	SLP-155B	CF201	2135321	Ceramic filter
R432LR	0113631	CF 4.7KΩ ±5% SRD1/6P	VARIABLE RESISTORS			CF202	2155512	Ceramic filter [for E, E(BS)]
R433	0113615	CF 1KΩ ±5% SRD1/6P	RT201	0150958	10kΩ-(B) (FM MPX ADJ.)		2155511	Ceramic filter [except E, E(BS)]
R501	1119405	MO 22Ω ±10% RS3B	RT501	0150955	1kΩ-(B) (TAPE SPEED ADJ.)	BPF101	2137191	FM band pass filter
R502	0113651	CF 33KΩ ±5% SRD1/6P	RV801LR	0189288	10kΩ-(A) (VOLUME CONTROL)	△F601	2727741	Fuse T800mA [for E(BS)]
R503	0113651	CF 33KΩ ±5% SRD1/6P	RV802LR	0189121	100kΩ-(B) (G.E CONTROL)		2727198	Fuse T800mA [for E, AU, W, W(UN), W(UNS)]
R504	0113627	CF 3.3KΩ ±5% SRD1/6P	RV803LR	0189121	100kΩ-(B) (G.E CONTROL)	S201	2628483	Lever switch (BAND SELECT) [except H, HC]
R505	0113651	CF 33KΩ ±5% SRD1/6P	RV804LR	0189121	100kΩ-(B) (G.E CONTROL)		2628486	Lever switch (BAND SELECT) [for H, HC]
R506	0113665	CF 120KΩ ±5% SRD1/6P	COILS & TRANSFORMERS			S202	2628486	Lever switch [AFC(RIF)]
R507	0113607	CF 470Ω ±5% SRD1/6P	L101	2137682	FM OSC. coil	S401	2628332	Slide switch (REC/PLAY SELECT)
R508LR	0113587	CF 68Ω ±5% SRD1/6P	L102	2135272	FM RF coil	S402	2628001	Lever switch (FUNCTION SELECT)
R509LR	0113615	CF 1KΩ ±5% SRD1/6P	L151	2137667	ANT. coil [for AU, W, W(UN), W(UNS)]	S403	2628486	Lever switch (DUBBING SPEED SELECT/FM MODE SELECT)
R510	0113607	CF 470Ω ±5% SRD1/6P		2137202	SW ANT. coil [for E]	S601	2628731	Slide switch [AC/BATT(DC)SELECT]
R511	0113615	CF 1KΩ ±5% SRD1/6P		2137203	SW ANT. coil [for E(BS)]	△S602	2618472	Switch (VOLTAGE SELECT) [for W, W(UN), W(UNS)]
R518	0113609	CF 560Ω ±5% SRD1/6P	L153	2758221	Ferrite antenna [for H, HC]	M401	2737441	Mic.
R520	0113651	CF 33KΩ ±5% SRD1/6P	L152, 153	2757984	Ferrite antenna [for AU, W, W(UN), W(UNS)]	CABINET CHASSIS		
R521	0113651	CF 33KΩ ±5% SRD1/6P	L152, 153	2757992	Ferrite antenna [for E, E(BS)]	1	3806791	Tuning knob
R522	0113651	CF 33KΩ ±5% SRD1/6P	L154	2137911	SW OSC. coil [for E, E(BS)]	2	4577817	BT screw (3ϕ x 30) (rear case)
R523	0113651	CF 33KΩ ±5% SRD1/6P	L154	2137912	SW OSC. coil [for AU, W, W(UN), W(UNS)]	3	3806801	Volume knob
R524	0113639	CF 10KΩ ±5% SRD1/6P	L155	2137902	MW OSC. coil [for E, E(BS)]	4	4044012	Handle
R802LR	0113647	CF 22KΩ ±5% SRD1/6P	L156	2137902	MW OSC. coil [for AU, W, W(UN), W(UNS)]	5	4044101	Front case assy [TRK-W330 HC]
R803LR	0113647	CF 22KΩ ±5% SRD1/6P	L156	2137901	LW OSC. coil [for E, E(BS)]		4044102	Front case assy [TRK-W350 H/HC]
R804LR	0113641	CF 12KΩ ±5% SRD1/6P	L156	2137904	MW OSC. coil [for H, HC]		4044041	Front case assy [TRK-W330 E]
R805LR	0113641	CF 12KΩ ±5% SRD1/6P	L157	2137684	Choke coil [except H, HC]			
R806LR	0113631	CF 4.7KΩ ±5% SRD1/6P	L401LR	2227991	Choke coil			
R807LR	0113631	CF 4.7KΩ ±5% SRD1/6P	T101	2137891	FM IF transformer			
R809LR	0113679	CF 470KΩ ±5% SRD1/6P	T201	2137892	FM IF transformer			
R810LR	0113631	CF 4.7KΩ ±5% SRD1/6P	ICs & TRANSISTORS					
R811LR	0113639	CF 10KΩ ±5% SRD1/6P	IC101	2300601	LA1186N			
			IC201	2301631	LA1810			
			IC401	2301191	TA7784P			
			IC501	2301651	LA4555			
			Q151	2329323	2SC460C [for E]			
			Q401	2329453	2SC945PA			
			Q402	2328083	2SA844E			
			Q403LR	2329453	2SC945PA			
			Q404LR	2329453	2SC945PA			
			Q405LR	2329453	2SC945PA			
			Q406	2319052	HIT8050C [for E, E(BS)]			
			Q501	2329453	2SC945PA			
			Q502	2328083	2SA844E			
			Q503	2319052	HIT8050C			

SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	
6	4044042	Front case assy [TRK-W350 E/E(BS)]	29	4477502	ANT. terminal	28	4819600	Azimuth screw	
	4044043	Front case assy [TRK-W350 AU/W/W(UN)]	30	4578976	BT flange screw (3 φ x 20) (power transformer)	29	4819017	Spring	
	4044044	Front case assy [TRK-W350 W(UNS)]	31	8744412	Bind head screw (3 φ x 12) (ROD. antenna)	30	4819611	Screw (2 φ x 6)	
	4044045	Front case assy [TRK-W330 W/AU]	32	2589261	Mechanism (TN-21VW-987) [TRK-W330]	31	4856296	Pinch roller spring	
	6	3806761	Cassette door (L) (TAPE 1) [TRK-W350]	32	2589272	Mechanism (TN-521ZVW-122) [TRK-W350]	32	4819006	PR stopper
		3806762	Cassette door (L) (TAPE 1) [TRK-W330]		2589272	Mechanism (TN-521ZVW-122) [TRK-W350]	33	4820218	Switch actuator spring
	7	3806771	Cassette door (R) (TAPE 2)	33	3806782	Cassette button	34	4819045	Screw
	8	3934271	Roller	34	4477492	REC plate	35	4819044	Eject slide lever spring
	9	4577661	Roller pin	35	8741104	Bind head screw (2 φ x 4)	36	4820216	MG arm spring
	11	4597203	Tuning shaft	36	8815111	Lock washer	37	4856291	MC arm
	12	4418013	E ring	△37	2712101	Power supply cord [for E]	38	4820215	Sub chassis
	13	4044141	Pulley holder assy	△	2749582	Power supply cord [for E(BS)]	39	4839379	FF gear
	14	3806921	Holder assy	△	2749622	Power supply cord [for AU]	40	4839378	Take up roller gear
	15	3806961	Pointer	△	2706584	Power supply cord [for W, W(UN),W(UNS)]	41	4839381	Take up reel assy
	16	3806871	Pulley	△	2706593	Power supply cord [for H, HC]	42	4839382	Back tension spring
17	3340321	Spring	△38	2249962	Power transformer (52g 4.8VA) [for E]	43	4850698	Washer (1.2 φ x 3.7 x 0.4)	
18	3392082	Eject spring [for TRK-W330HC, TRK-W350H/HC]	△	2249963	Power transformer (52g 4.8VA) [for E(BS), AU]	44	4839370	Back tension spring	
	3392081	Eject spring [except TRK-W330HC, TRK-W350H/HC]	△	2249961	Power transformer (45g 2.6VA) [for W, W(UN),W(UNS)]	45	4832421	Record safety lever	
19	3308121	Snap knob	△	2249965	Power transformer (52g 4.8VA) [for H, HC]	46	4819036	Pack spring	
20	3950381	Damper assy	39	4436666	Terminal	47	4819063	Tapping screw (2 φ x 3)	
21	2403972	Speaker 10cm	TN-21-VW-987 (for W330)			48	4820225	RF pulley arm spring	
22	4578972	BT flange screw (3 φ x 10) (speaker)				1	4818992	Switch plate	49
23	8699410	BT bind head screw (3 φ x 10) (cassette chassis, holder)	2	4839371	Push button actuator assy	50	4820227	Belt	
24	8691410	BT bind head screw (3 φ x 10) (damper, pulley holder)	3	4820212	REC button lever	51	4833455	PAUSE bracket	
25	4044121	Rear case assy [TRK-W330 HC]	4	4820213	PLAY button lever	52	4819191	Tapping screw (2 φ x 6)	
	4044122	Rear case assy [TRK-W350 H]	5	4818996	RWD button lever	53	4819607	Bind tapping screw (2 φ x 5)	
	4044123	Rear case assy [TRK-W350 HC]	6	4818997	FF button lever	54	4833457	Belt	
	4044061	Rear case assy [TRK-W330 E]	7	4818998	STOP button lever	55	4832432	Washer (2.05 φ x 4 x 0.5)	
	4044062	Rear case assy [TRK-W350 E]	8	4818999	PAUSE button lever assy	56	4819078	Washer (1.55 φ x 3.8 x 0.5)	
	4044063	Rear case assy [TRK-W350 E(BS)]	9	4818990	RWD lever	57	4831610	Metal guide	
	4044064	Rear case assy [TRK-W350 AU]	10	4833451	PAUSE lever	58	4819068	Tapping screw (2 φ x 4)	
	4044065	Rear case assy [TRK-W350 W]	11	4819132	PAUSE lever spring	59	4856292	RF pulley arm assy	
	4044066	Rear case assy [TRK-W350 W(UN)]	12	4819133	PAUSE stopper	60	4832415	Take up gear plate assy	
	4044067	Rear case assy [TRK-W350 W(UNS)]	13	4850692	Button lever spring	61	4833466	Special screw	
4044068	Rear case assy [TRK-W330 W]	14	4856281	Leaf switch	62	4819533	Motor collar screw		
4044069	Rear case assy [TRK-W330 AU]	15	4819007	Button lever spring	63	4819039	Motor rubber		
26	3806751	Battery cover	16	4820217	PLAY button lever spring	64	4833465	Special screw	
27	3392041	Spring	17	4819008	Actuator spring	65	4833463	Lever	
28	2758401	ROD. antenna	18	4819009	Auto lever	66	4833464	Lever	
			19	4819000	Auto lever spring	67	4833467	Spring	
			20	4820214	Button lever spring	68	4833454	Flywheel assy	
			21	4832522	Screw	69	4820231	Flywheel assy	
			22	4839372	Pinch roller arm assy	70	4819020	TG plate spring	
			23	4820219	Head panel	71	4833458	Insulation mat	
			24	4820221	Head panel spring	72	4856293	Mat	
			25	4819014	Head base	73	4819043	Eject slide lever	
			26	4832412	Sensing plate assy	74	2557591	R/P head	
			27	4819060	Screw (2 φ x 7)	75	2557592	P head	
						76	2557551	Erase head	
						77	4832091	Leaf switch	
						78	4819003	Supply reel assy	
						79	4856295	Motor assy	
						80	4835915	Motor bracket	
						TN-521-ZVW-122 (for W350)			
						1	4819131	PAUSE lever	
						2	4819132	PAUSE lever spring	
						3	4842395	Pack spring plate	
						4	4853652	Auto lever (F)	
						5	4853653	Auto lever (F) spring	
						6	4853654	Spring stopper	



SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION	SYMBOL No.	PART No.	DESCRIPTION
7	4853655	Auto lever (R)	68	4842404	Motor rubber	126	4856283	Main belt
8	4853656	Auto lever (R) spring	69	4819533	Motor collar screw	127	4850092	Flywheel
9	4853657	Eject slide lever	70	4856278	Mat	128	4842428	Reel base assy
10	4853658	Eject slide lever spring	71	4853715	P kick lever spring	129	4842429	T gear plate assy
11	4833465	Special screw	73	4853716	Lock actuator spring	130	4839378	Take up roller gear
12	4853650	Turn over arm	74	4853717	SW actuator spring	131	4819020	TG plate spring
13	4853661	Turn over spring	75	4853719	C tapping screw (2 φ x 3)	132	4839379	FF gear
14	4853662	Button base assy	76	4819191	Tapping screw (2 φ x 6)	133	4842420	Back tension spring
15	4853663	T gear arm (F) assy	77	4842443	Washer (2.1 φ x 5 x 0.5)	134	4842431	Supply reel assy
16	4853664	T gear arm (F) spring	78	4853710	Tams screw (2 φ x 6)	135	4853729	Take up reel assy
17	4853665	T cam gear (F)	79	4853721	Camera S tapping screw (1.7 φ x 4)	136	4832421	Record safety lever
18	4853666	T gear arm (R) assy	80	4853722	Screw (2 φ x 4.5)	137	4839382	Back tension spring
19	4853667	T gear arm (R) spring	81	4842414	Washer (2 φ x 3.5 x 0.3)	138	4819043	Eject slide lever
20	4853668	T cam gear (R)	82	4842430	Washer (2.1 φ x 3 x 0.3)	139	4819044	Eject slide lever spring
21	4853669	Slide plate	83	4853723	Washer (1.45 φ x 4 x 0.5)	140	4842433	Bracket
22	4853660	Lock actuator assy	84	4819068	Tapping screw (2 φ x 4)	141	2557591	R/P head
23	4853671	Lock release spring	85	4842412	Camera S tapping screw (1.7 φ x 2.5)	142	2557551	Erase head
24	4853672	SW actuator assy	86	4842444	Washer (1.2 φ x 3 x 0.25)	143	4819018	MG arm
25	4856271	Mode button lever	87	4853724	Camera S tapping screw (1.7 φ x 3)	144	4820218	Switch actuator spring
26	4853674	Button lever spring	88	4819077	Washer (1.2 φ x 3 x 0.4)	145	4856279	Motor assy
27	4856272	PLAY button lever	89	4853725	Washer (3 φ x 8.5 x 0.13)	4856284	Motor assy (Note 1)(Remarque 1)	
28	4856273	FF button lever (R)	90	4853726	Camera S tapping screw (1.7 φ x 8)	4853659	Sub chassis assy	
29	4853677	FF button lever spring	91	4818992	Switch plate	4842434	Camera tapping screw (2 φ x 3.5)	
30	4856274	FF button lever (F)	92	4839371	Push button actuator assy	4819078	Washer (1.55 φ x 3.8 x 0.5)	
31	4856275	STOP button lever	93	4820212	REC button lever	4820215	Sub chassis	
32	4856276	Program button lever assy	94	4856270	PLAY button lever	4819607	Bind tapping screw (2 φ x 5)	
33	4853681	Pull arm spring	95	4818996	RWD button lever	4819611	Screw (2 φ x 6)	
34	4856277	STOP button lever spring	96	4818997	FF button lever	4819060	Screw (2 φ x 7)	
35	4853683	Relay plate	97	4818998	STOP button lever	4819600	Azimuth screw	
36	4853684	FF SW plate	98	4818999	PAUSE button lever assy	4832431	Tapping bind screw (2 φ x 4)	
37	4853685	R.C. spring	99	4818990	RWD lever	4853731	Washer (1.2 φ x 3.7 x 0.4)	
38	4853686	Auto control arm (F)	100	4833451	PAUSE lever	4853732	Button lever spring (P)	
39	4853687	Control collar	101	4819132	PAUSE lever spring	4853733	RC arm	
40	4853688	Auto control arm (R)	102	4819133	PAUSE stopper	4858251	Motor bracket	
41	4853689	Head panel	103	4819100	Button lever spring	4853711	Motor bracket (Note 2)(Note 3) (Remarque 2) (Remarque 3)	
42	4853680	R.C. plate	104	4819007	Button lever spring			
43	4853691	R.C. plate spring	105	4820217	PLAY button lever spring			
44	4853692	H.P. collar	106	4819008	Actuator spring			
45	4853693	Tape guide	107	4819009	Auto lever			
46	4853694	Head spring plate	108	4819000	Auto lever spring			
47	2557631	P head	109	4820214	Button lever spring			
48	4842401	Slide switch	110	4856281	Leaf switch			
49	4853696	Switch bracket	111	4820219	Head panel			
50	4853697	Pinch roller spring (F)	112	4842423	Sensing plate assy			
51	4853698	Pinch roller spring (R)	113	4832522	Screw			
52	4853699	Pinch roller (F) assy	114	4820221	Head panel spring			
53	4853690	Pinch roller (R) assy	115	4819014	Head base			
54	4853701	Reel plate assy	116	4819006	PR stopper			
55	4853702	Reel assy	117	4819045	Screw			
56	4853703	Leaf switch	118	4819017	Spring			
57	4819195	Tapping screw (2 φ x 5)	119	4839372	Pinch roller arm assy			
58	4853704	FF gear arm (F) assy	120	4842424	Pinch roller spring			
59	4853705	FF gear	121	4831610	Metal guide			
60	4853706	FF gear arm (R) assy	122	4856282	RF pulley arm assy			
61	4853707	FF gear arm collar	123	4820225	RF pulley arm spring			
62	4853708	FF gear arm spring (F)	124	4820226	RF arm collar screw			
63	4853709	Flywheel assy	125	4820227	Belt			
64	4853700	Main belt						
65	4853712	P kick lever						
66	4833463	Lever						
67	4833466	Special screw						

**Note 1**

In order to prevent the motor bracket from coming into contact with the flywheel, the motor assembly part number has been changed along with the change in the installation position of the motor. (The only difference between the two is the distance from the motor to the motor pulley.)

When ordering the motor assembly, check the shape of the motor bracket with reference to the table below and order the motor assembly that fits the motor bracket.

Parts Number	4856279	4856284
Destination and Serial No.	W350E : T70906001 – T70913000 W350E(BS) : T70900001 – T70906000 W350 : T70903001 – T70904000	Others

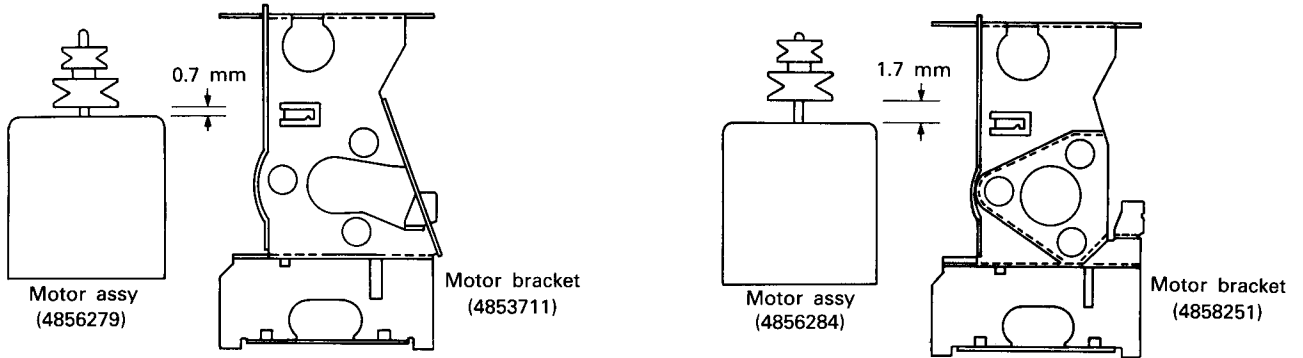
**Note 2**

There are two types of motor bracket shapes to go with the change in the motor assembly part number, so be careful not to confuse them when ordering.

**Note 3**

When replacing the 4853711 motor bracket, replace both the motor bracket and the motor assembly.

(This is because fitting size of the motor pulley must be changed.)



**Remarque 1**

Afin d'empêcher que le support du moteur ne vienne en contact avec le volant, le numéro de pièce du moteur a été modifié, de même que la position de montage du moteur. (La seule différence entre les deux modèles est la distance du moteur à la poulie moteur).

Avant de commander un moteur, vérifiez la forme du support en vous référant au tableau ci-dessous et commandez le moteur qui correspond au support que vous avez.

Numéro de pièce	4856279	4856284
Destination et n° de série	W350E : T70906001 – T70913000 W350E(BS) : T70900001 – T70906000 W350 : T70903001 – T70904000	Autres

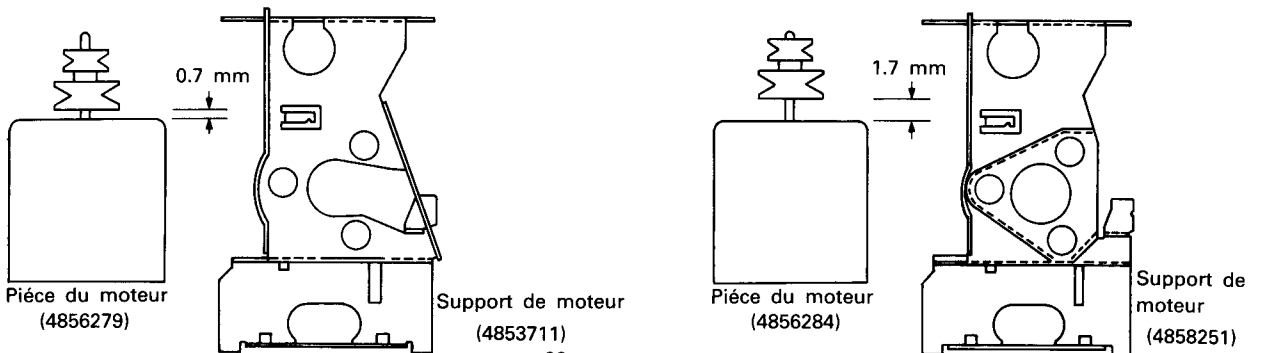
**Remarque 2**

Il existe deux formes de support de moteur pour correspondre au changement du numéro de pièce du moteur. Faites attention de ne pas les confondre lorsque vous passez votre commande.

**Remarque 3**

Lors du remplacement du support du moteur 4853711, il est nécessaire de remplacer à la fois le support de moteur et l'ensemble moteur.

(La raison en est que la dimension de montage de la poulie du moteur doit être modifiée).





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