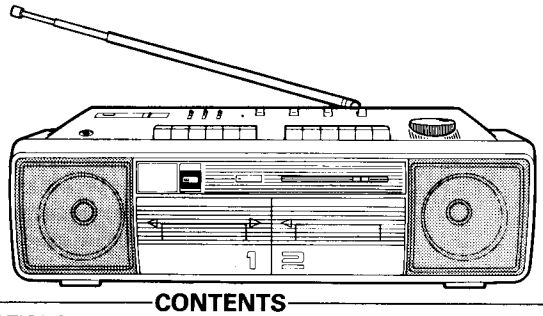
HITACHI
SERVICE MANUAL

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 ⚠ 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]

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)]

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)]

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

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

● GENERAL SECTION

Semiconductors:	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
Power Supply:	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)]
Power Consumption:	14W
Power Output:	20W P.M.P. (AC operation) 2W/CH (10% T.H.D. DC operation)
Speakers:	10cm (x 2)
Dimensions:	512 (W) x 162 (H) x 194 (D) mm
Weight:	3.7 kg (with batteries)

Specifications are subject to change without notice for performance improvement.

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 ⚠ 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

Systéme de circuit:	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]
Gammes d'accord:	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)]
Fréquence intermédiaire:	FM: 10.7 MHz OC/PO/GO: 468 kHz [pour E, E(BS)] OC2/OC1/PO(AM): 455 kHz [sauf E, E(BS)]
Sensibilite:	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] 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)]
Antennes: (aériens)	FM/OC/OC2: antenne tige (aérien) OC1/PO(AM)/GO: antenne en ferrite incorporée (aérien)

● SECTION LECTEUR-ENREGISTREUR DE CASSETTE

Bande:	En cassette
Système de piste:	4 pistes, 2 canaux stéréo
Vitesse de défilement:	4,75 cm/s
Système d'enregistrement:	Polarisation c.a. (TAPE2)
Système d'effacement:	Aimant (TAPE2)
Taux déffacement:	50 dB
Réponse en fréquence:	Normal: De 60 à 10000 Hz
Rapport signal-bruit:	40 dB
Pleurage et scintillement:	0,25% (watts effic.)
Diaphonie:	Entre les pistes: 60 dB Entre les canaux: 40 dB
Impédance et sensibilité d'entrée:	CD/entrée ligne: 700 mV, 40 kΩ

Impédance de charge de sortie:	De 8 à 100 Ω (casque)
Distortion:	3%
Moteur:	Micro moteur CC
Tête:	Permalloy

● CARACTÉRISTIQUES GÉNÉRALES

Semi conducteurs:	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
Alimentation:	Secteur alternatif: 120V, 60 Hz [pour H, HC] 220V, 50 Hz [pour E] 240V, 50 Hz [pour E(BS), AU] 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: utilisen un adaptateur pour batterie [pour W, W(UN), W(UNS)]
Consommation électrique:	14W
Niveau de sortie:	20W PMP (fonctionnement sur le secteur) 2W/canal (C.C. à 10% D.H.T.)
Haut-parleurs:	10 cm (x 2)
Dimensions:	512 (L) x 162 (H) x 194 (P) mm
Poids:	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 Ⓐ.

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 Ⓐ 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 Ⓑ and two more connectors Ⓒ connected to the front case (cassette mechanism), as well as one connector Ⓓ connected to the LED P.W.B.; release the claw in the direction of the arrow Ⓑ.

(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 Ⓒ.

(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 ④, remove the holder, and remove six screws ⑤. At this time, remove eight screws ⑥ 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 ⑦ and release three claws in the direction of the arrow Ⓓ.

DÉMONTAGE

1. Boîtier arrière (Fig. 1)

Enlever les sept vis ① et retirer le connecteur Ⓐ.

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

(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 Ⓒ.

(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.)

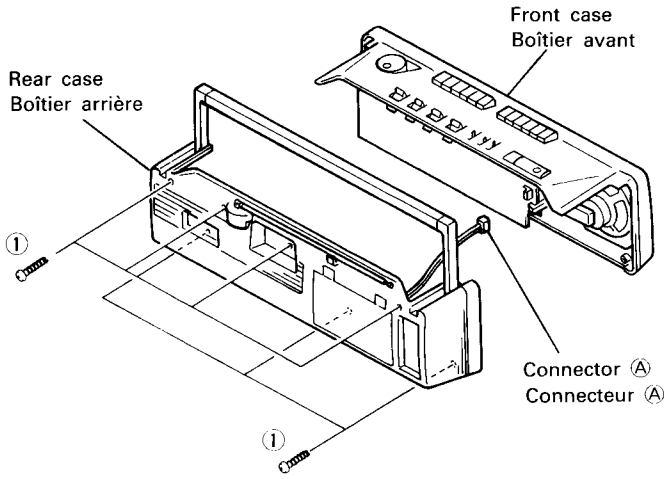


Fig. 1

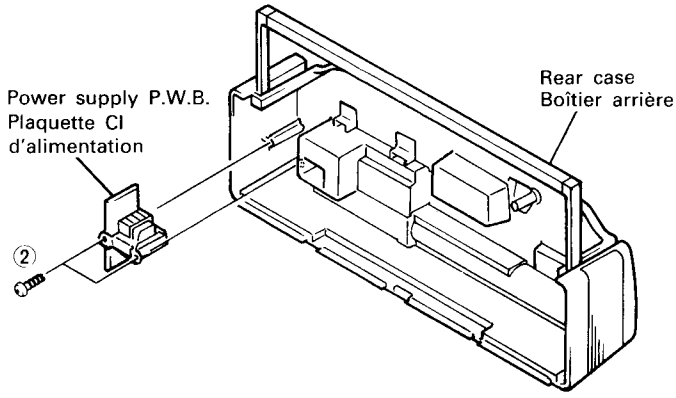


Fig. 2

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 Ⓓ.

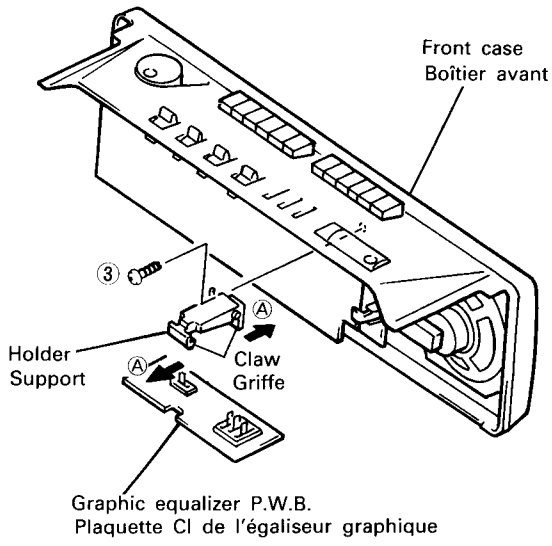


Fig. 3

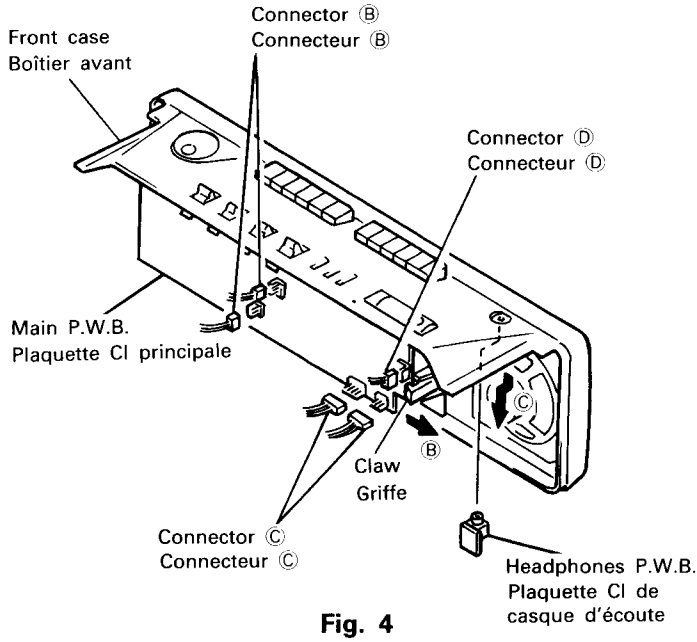


Fig. 4

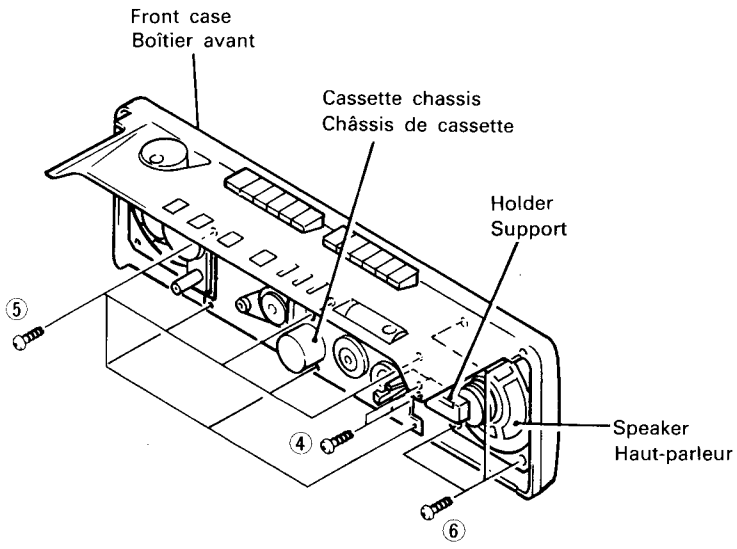


Fig. 5

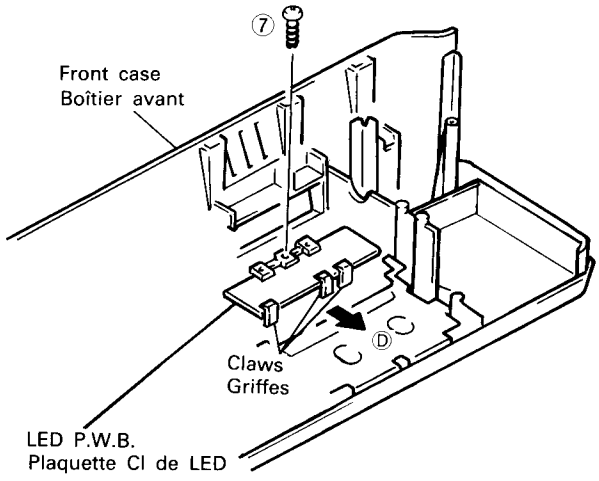


Fig. 6

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.

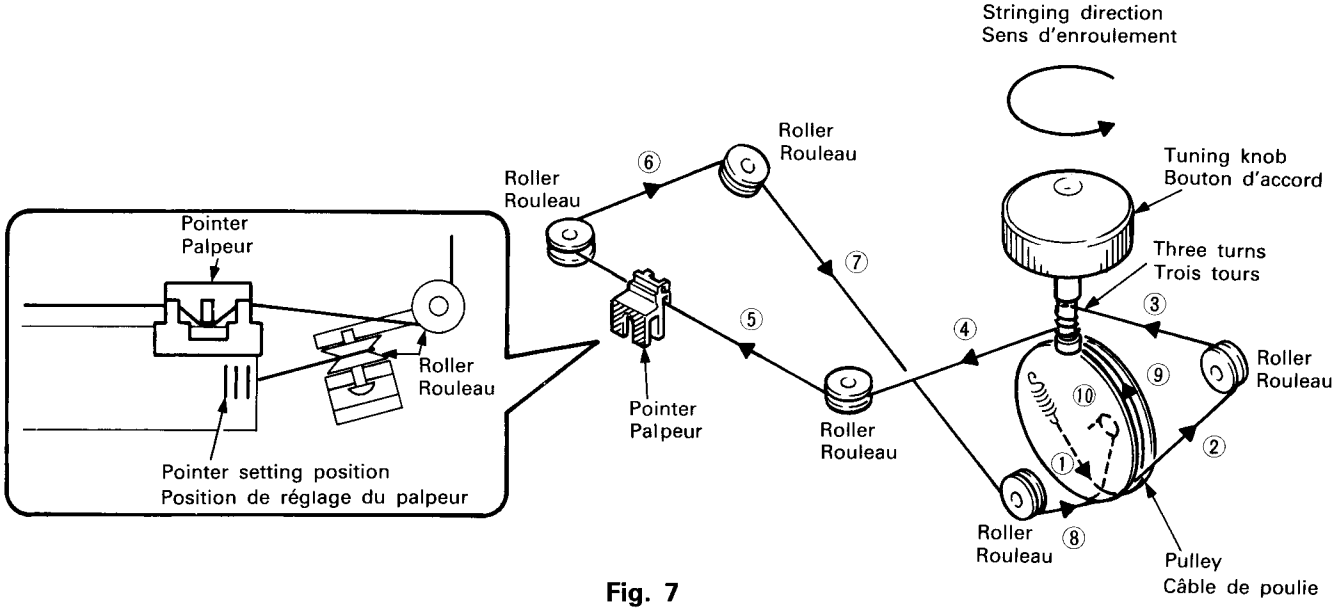


Fig. 7

ADJUSTMENT

1. RADIO SECTION

● Adjustment points

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

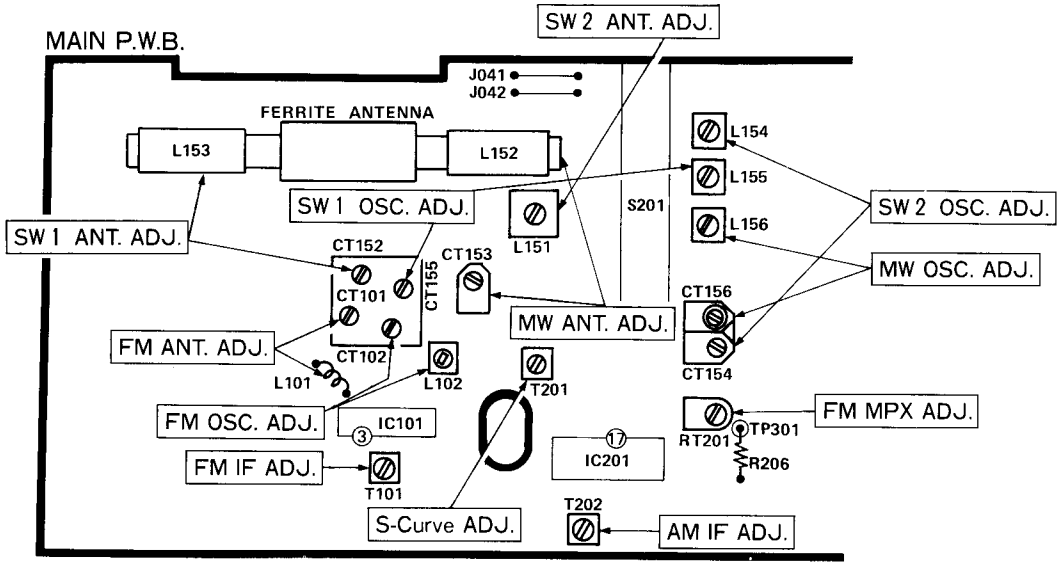


Fig. 8

(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.) • VTVM • Oscilloscope	J(041), J(042) (through SW dummy antenna) (Note 2)	Stereo jack	6.7 MHz	Lowest	L154	Max.
	(2)					23 MHz	Highest	CT154	
	(3)					Repeat steps (1) and (2)			
3	(1)	SW2 ANT. (Tracking)				8 MHz	8 MHz	L151	Max.
4	(1)	SW1 OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.) • VTVM • Oscilloscope	Ferrite antenna (Note 3)	Stereo jack	2.2 MHz	Lowest	L155	Max.
	(2)					7.3 MHz	Highest	CT155	
	(3)					Repeat steps (1) and (2)			
5	(1)	SW1 ANT. (Tracking)				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 (400 Hz, 30% mod.) • VTVM • Oscilloscope	Ferrite antenna (Note 3)	Stereo jack	515 kHz	Lowest	L156	Max.
	(2)					1,650 kHz	Highest	CT156	
	(3)					Repeat steps (1) and (2)			
7	(1)	MW ANT. (Tracking)				600 kHz	600 kHz	L152	Max.
	(2)					1,400 kHz	1,400 kHz	CT153	
	(3)					Repeat steps (1) and (2)			

● **Adjustment points**
[for E, E(BS)]

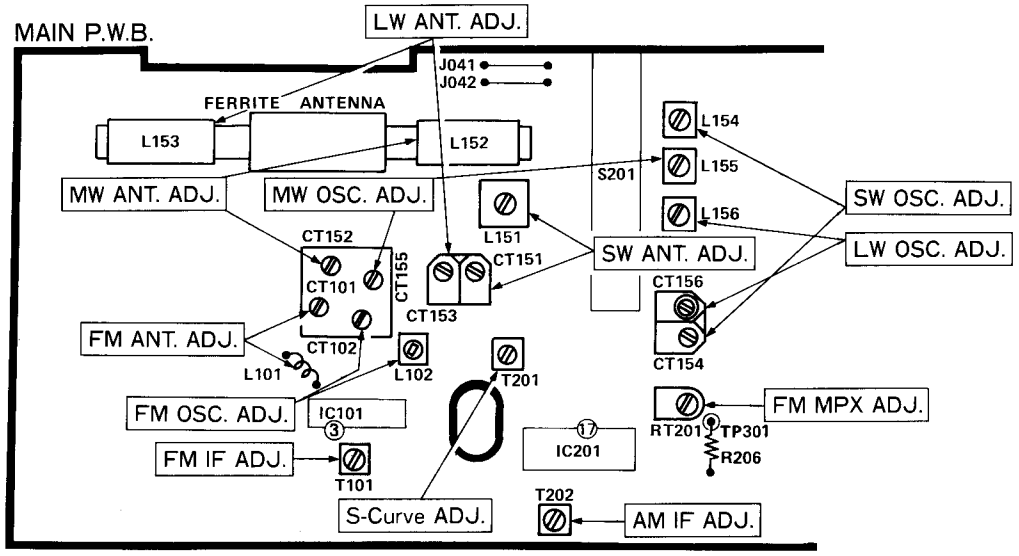


Fig. 9

(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.) • VTVM • Oscilloscope	J(041), J(042) (through SW dummy antenna) (Note 2)	Stereo jack	5.8 MHz	Lowest	L154	Max.
	(2)					18.5 MHz	Highest	CT154	
	(3)					Repeat steps (1) and (2)			
3	(1)	SW ANT. (Tracking)				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 (400 Hz, 30% mod.) • VTVM • Oscilloscope	Ferrite antenna (Note 3)	Stereo jack	515 kHz	Lowest	L155	Max.
	(2)					1,650 kHz	Highest	CT155	
	(3)					Repeat steps (1) and (2)			
5	(1)	MW ANT. (Tracking)				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 (400 Hz, 30% mod.) • VTVM • Oscilloscope (RIF switch:B)	Ferrite antenna (Note 3)	Stereo jack	145 kHz	Lowest	L156	Max.
	(2)					290 kHz	Highest	CT156	
	(3)					Repeat steps (1) and (2)			
7	(1)	LW ANT. (Tracking)				160 kHz	160 kHz	L153	Max.
	(2)					270 kHz	270 kHz	CT153	
	(3)					Repeat steps (1) and (2)			

● Adjustment points
[for H, HC]

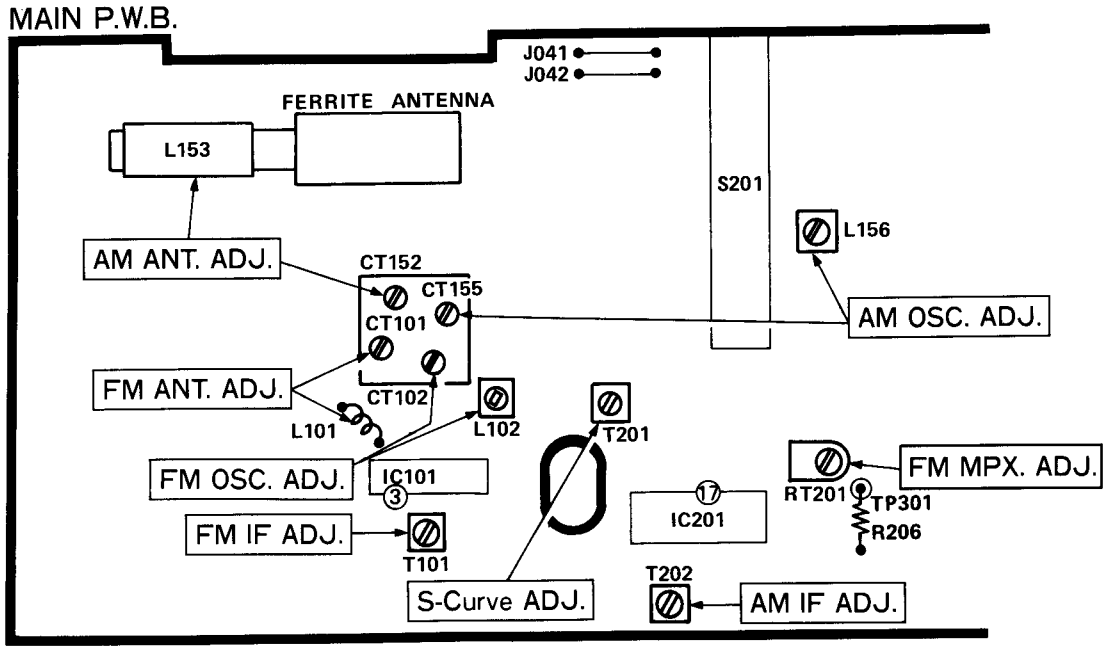


Fig. 10

(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.) • VTVM • Oscilloscope	Ferrite antenna (Note 3)	Stereo jack	515 kHz	Lowest	L156	Max.
	(2)					1,650 kHz	Highest	CT155	
	(3)					Repeat steps (1) and (2)			
3	(1)	AM ANT. (Tracking)				600 kHz	600 kHz	L153	Max.
	(2)					1,400 kHz	1,400 kHz	CT152	
	(3)					Repeat steps (1) and (2)			

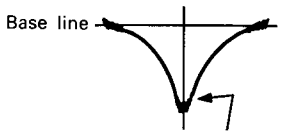
(2) FM Section

*( ) For W. Germany and Italy

Step		Adjustment Item	Measuring Instrument and Connection: Measuring Instrument	Input Terminal	Output Terminal	Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
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.
	(2)					109 MHz *(108 MHz)	Highest	CT102	
	(3)					Repeat steps (1) and (2)			
3	(1)	FM ANT. (Tracking)				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	J(041), J(042) (98 MHz, 60 dBμ 0% mod. Tuning state)	TP301	—	—	RT201	75.7kHz ±100Hz (Note 7)

Note:

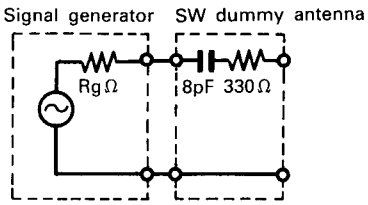
1. Feed in a weak signal from the genescope. Adjust T202 for maximum gain and the waveform of Fig. 11.



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

Fig. 11

2. SW dummy antenna shows Fig. 12.



Rg: SG's output impedance

Fig. 12

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

4. Feed in a week signal to No.3 pin of IC101 from the genescope. Adjust T101 for maximum gain and the waveform indicated in Fig. 13. 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.

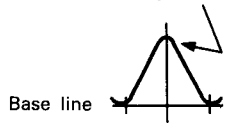


Fig. 13

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.

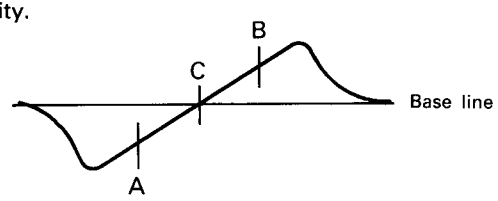
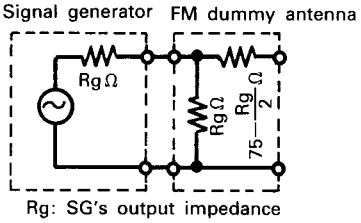


Fig. 14

6. FM dummy antenna shows Fig. 15.



Rg: SG's output impedance

Fig. 15

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

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 with in 3 dB.)

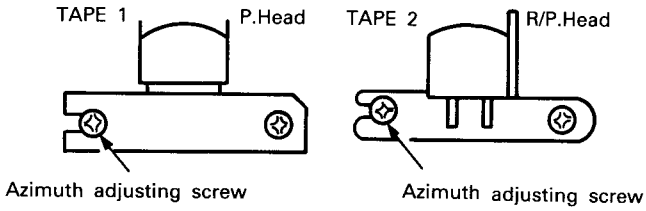


Fig. 16

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.

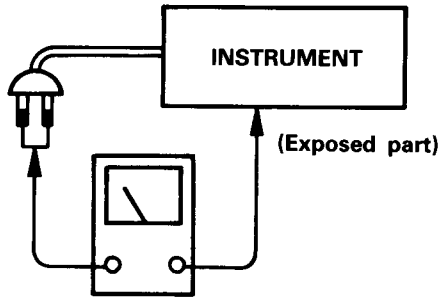
MAINTENANCE

■ **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.



Insulation tester (DC 500V)

RÉGLAGE

1. SECTION RADIO

● Points de réglage
[pour W, W(UN), W(UNS), AU]

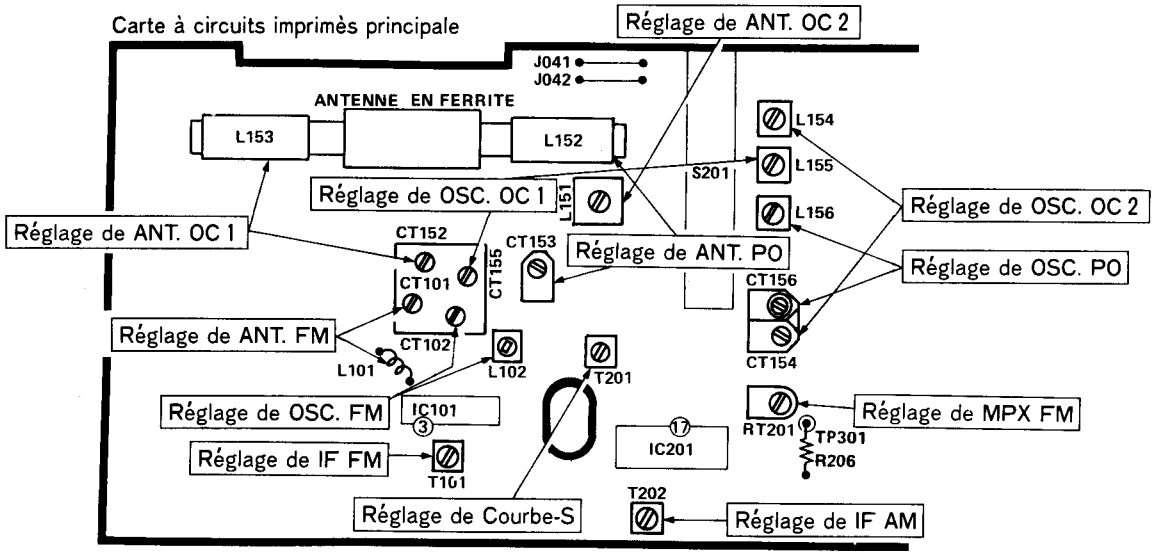


Fig. 17

(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			Générateur 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	• Générateur (455 kHz)	Antenne en ferrite (Remarque 3)	Broche n°17 du IC201	455 kHz	La plus haute	T202	(Remarque 1)
2	(1)	OSC. OC2 (coverture)	• 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.
	(2)					23 MHz	La plus haute	CT154	
	(3)					Répéter les étapes (1) et (2)			
3	(1)	ANT. OC2 (poursuite)				8 MHz	8 MHz	L151	Max.
4	(1)	OSC. OC1 (coverture)	• 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.
	(2)					7,3 MHz	La plus haute	CT155	
	(3)					Répéter les étapes (1) et (2)			
5	(1)	ANT. OC1 (poursuite)				2,7 MHz	2,7 MHz	L153	Max.
	(2)					6,3 MHz	6,3 MHz	CT152	
	(3)					Répéter les étapes (1) et (2)			
6	(1)	OSC. PO (coverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	515 kHz	La plus basse	L156	Max.
	(2)					1650 kHz	La plus haute	CT156	
	(3)					Répéter les étapes (1) et (2)			
7	(1)	ANT. PO (poursuite)				600 kHz	600 kHz	L152	Max.
	(2)					1400 kHz	1400 kHz	CT153	
	(3)					Répéter les étapes (1) et (2)			

● **Points de réglage**
[pour E, E(BS)]

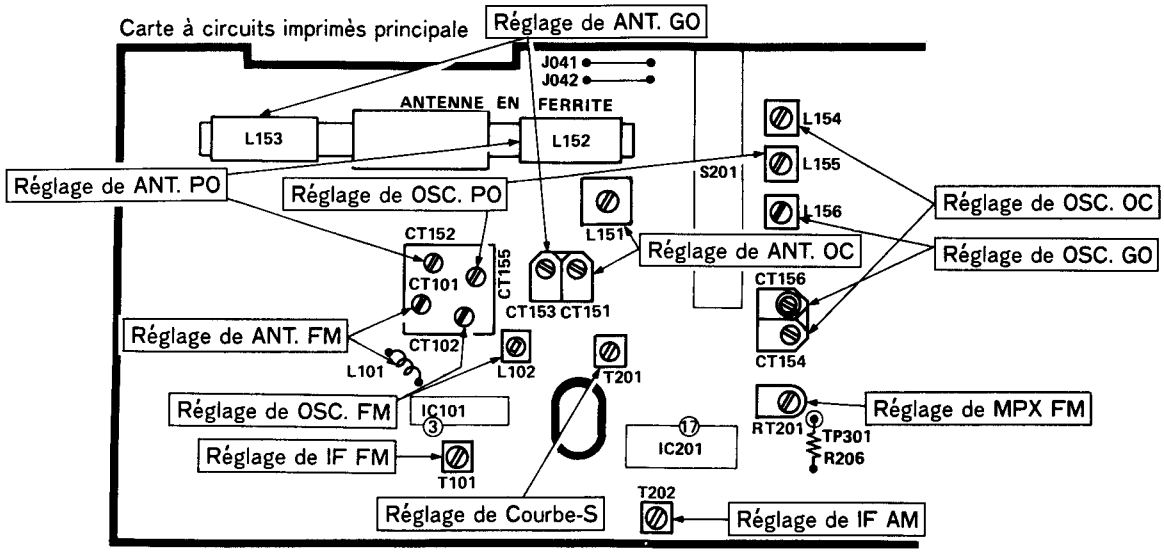


Fig. 18

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

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				
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)
2	(1)	OSC. OC (coverture)	• 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	5,8 MHz	La plus basse	L154	Max.
	(2)					18,5 MHz	La plus haute	CT154	
	(3)					Répéter les étapes (1) et (2)			
3	(1)	ANT. OC (poursuite)				6,5 MHz	6,5 MHz	L151	Max.
	(2)					16 MHz	16 MHz	CT151	
	(3)					Répéter les étapes (1) et (2)			
4	(1)	OSC. PO (coverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	515 kHz	La plus basse	L155	Max.
	(2)					1650 kHz	La plus haute	CT155	
	(3)					Répéter les étapes (1) et (2)			
5	(1)	ANT. PO (poursuite)				600 kHz	600 kHz	L152	Max.
	(2)					1400 kHz	1400 kHz	CT152	
	(3)					Répéter les étapes (1) et (2)			
6	(1)	OSC. GO (coverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	145 kHz	La plus basse	L156	
	(2)					290 kHz	La plus haute	CT156	
	(3)					Répéter les étapes (1) et (2)			
7	(1)	ANT. GO (poursuite)				160 kHz	160 kHz	L153	
	(2)					270 kHz	270 kHz	CT153	
	(3)					Répéter les étapes (1) et (2)			

● **Points de réglage [pour H, HC]**

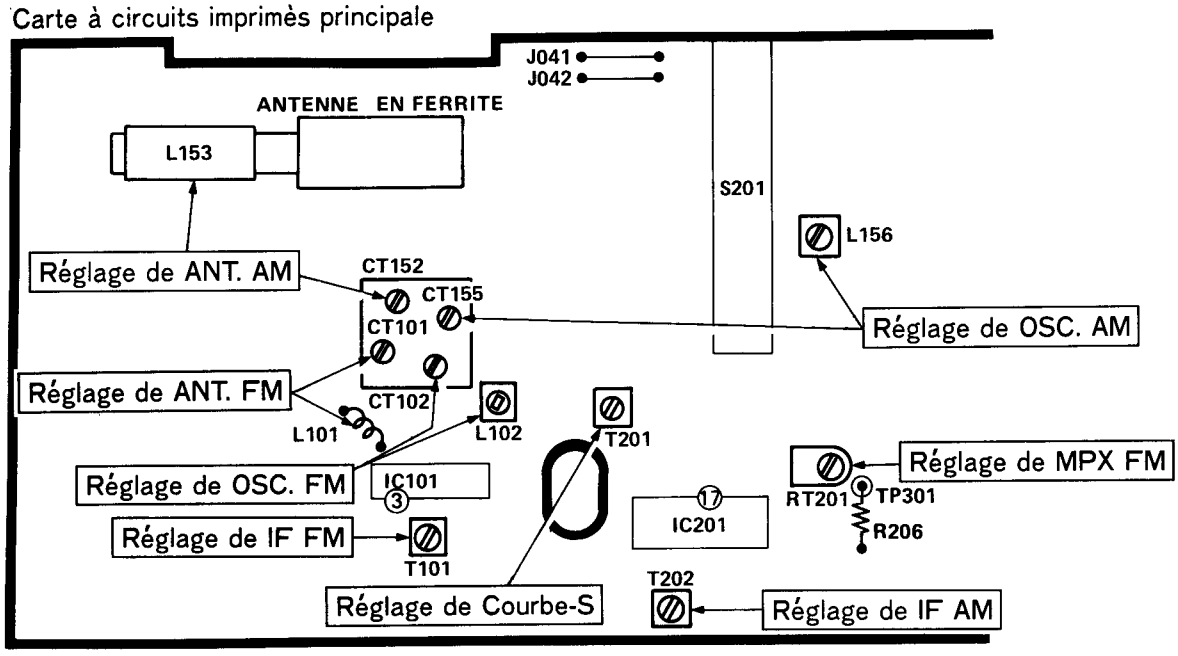


Fig. 19

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

Etape		Objet de réglage	Instrument de mesure et branchements			Générateur 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	• Générateur (455 kHz)	Antenne en ferrite (Remarque 3)	Broche n°17 du IC201	455 kHz	La plus haute	T202	(Remarque 1)
2	(1)	OSC. AM (coverture)	• Générateur de signal AM (400 Hz, mod. 30%) • VTVM • Oscilloscope	Antenne en ferrite (Remarque 3)	Stéréo Jack	515 MHz	La plus basse	L156	Max.
	(2)					1650 MHz	La plus haute	CT155	
	(3)					Répéter les étapes (1) et (2)			
3	(1)	ANT. AM (poursuite)				600 kHz	600 kHz	L153	Max.
	(2)					1400 kHz	1400 kHz	CT152	
	(3)					Répéter les étapes (1) et (2)			

(2) Section FM

*( ) pour la RFA et Italie.

Etape		Objet du réglage	Instrument de mesure et branchement			Généescope 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 (coverture)	• 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.
	(2)					* 109 MHz (108 MHz)	La plus haute	CT102	
	(3)					Répéter les étapes (1) et (2)			
3	(1)	ANT. FM (poursuite)				90 MHz	90 MHz	L101	Max.
	(2)					106 MHz	106 MHz	CT101	
	(3)					Répéter les étapes (1) et (2)			
4	(1)	MPX FM (Multiplex)	• Fréquencemétre	J (041), J (042) (98 MHz, 60 dBμ 0% mod. état accord)	TP301	—	—	RT201	75,7kHz ±100Hz (Remarque 7)

Remarque:

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

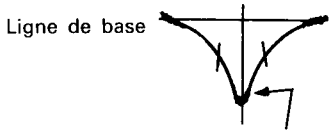
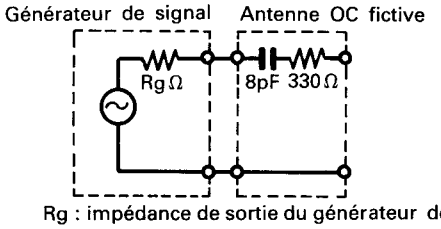


Fig. 20

2. Antenne OC fictive



Rg : impédance de sortie du générateur de signal

Fig. 21

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

4. 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.

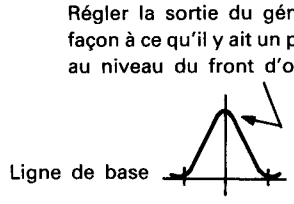


Fig. 22

5. 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.

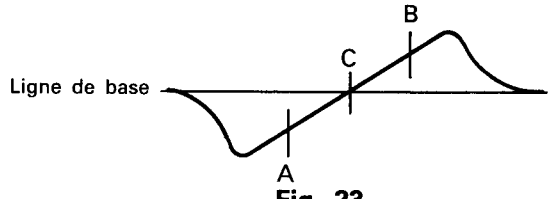
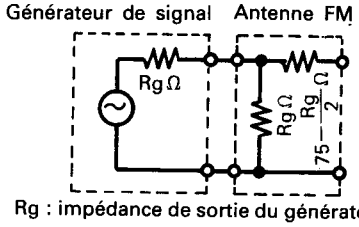


Fig. 23

6. Antenne FM fictive



Rg : impédance de sortie du générateur de signal

Fig. 24

7. Relier le fréquencemètre sur le TP301 et brancher une résistance de 100 kΩ.
(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 entraînear 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.)

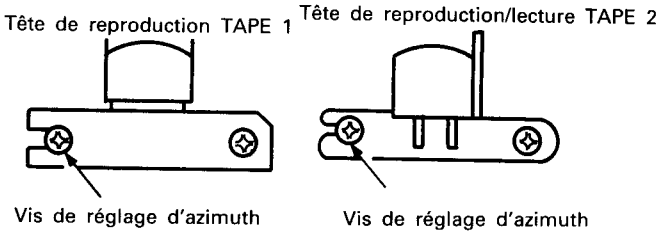


Fig. 25

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 Entre moulures et piéces métalliques	Molycoat (EL-10M)
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.

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

PRINTED WIRING BOARD · PLAN DE BASE

※ : Axial lead cylindrical ceramic capacitor.
※ : Condensateur ceramique clindrique a conducteur axial.

stan à l'aide

Lecture
lz ± 30 Hz
Sortie max. marque 3)

e les valeurs
oit être com-

on/lecture TAPE 2

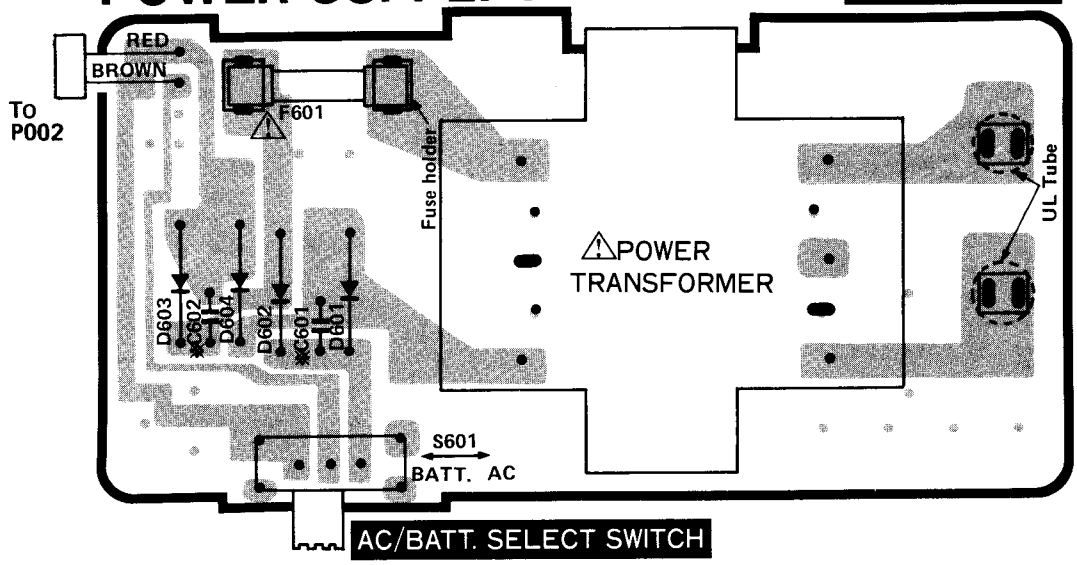
e d'azimuth

hoteur 0)
ionic pour (#1600)
at M)
GB-TS-1)

ır doivent être
raisse blanche

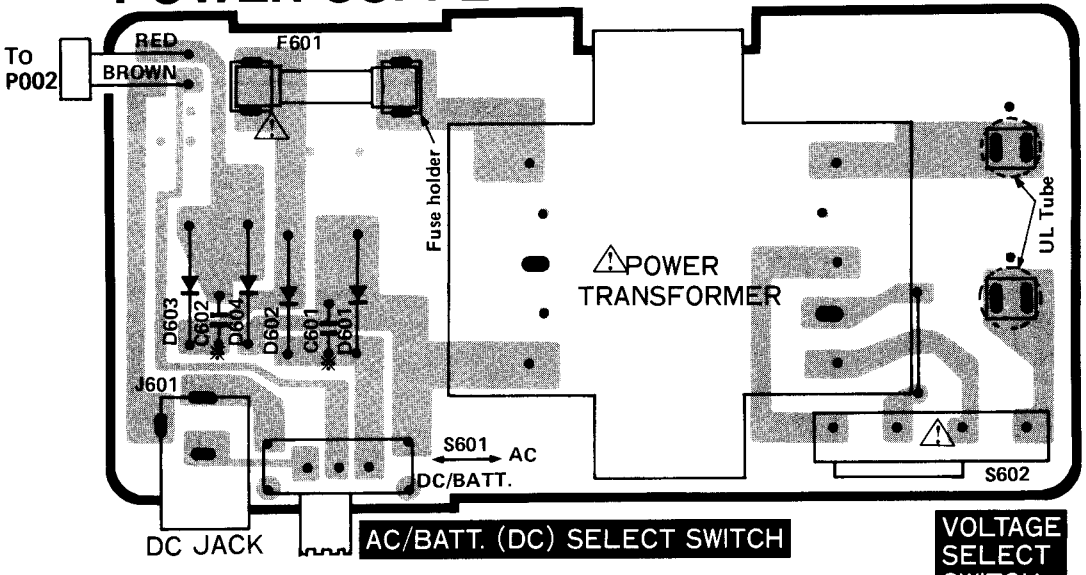
POWER SUPPLY P.W.B.

for E, E(BS), AU



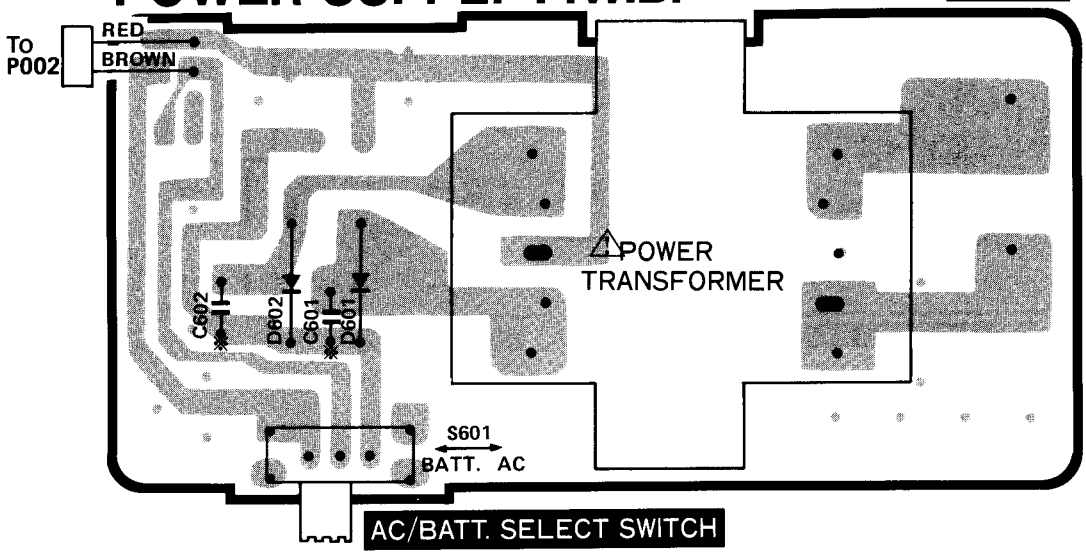
POWER SUPPLY P.W.B.

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



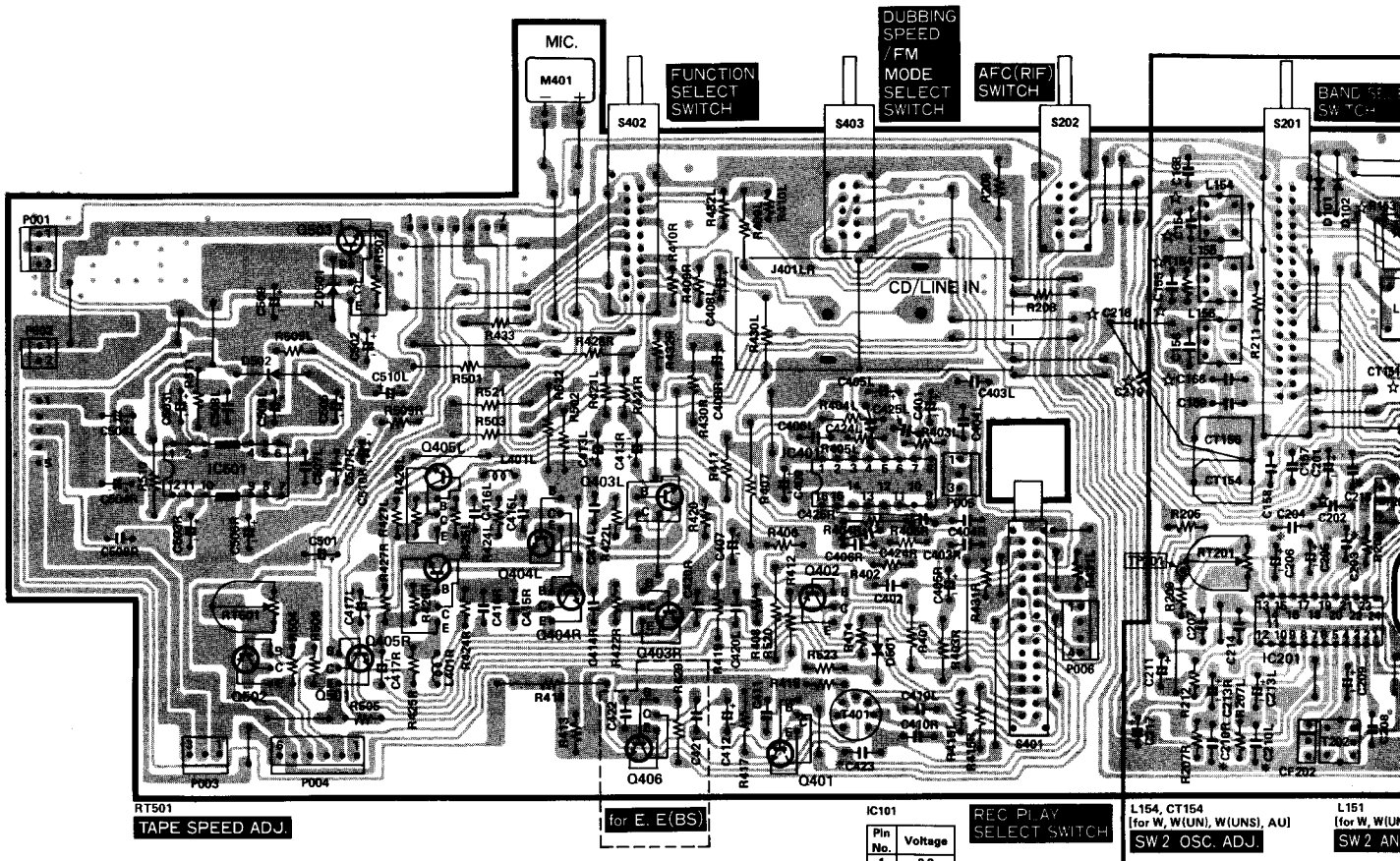
POWER SUPPLY P.W.B.

for H, HC



PRINTED WIRING BOARD
PLAN DE BASE

※ : Axial lead cylindrical ceramic capacitor.
※ : Condensateur ceramique clindrique a conducteur axial.



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				

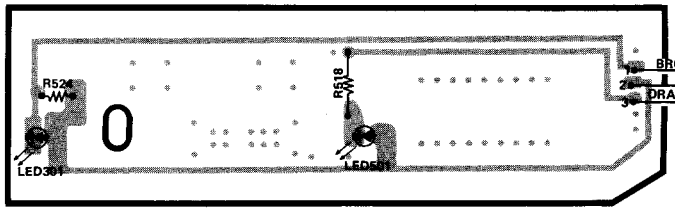
Pin No.	Voltage
1	0.9
2	1.6
3	3.8
4	0
5	0
6	3.8
7	1.8
8	3.3
9	3.8

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

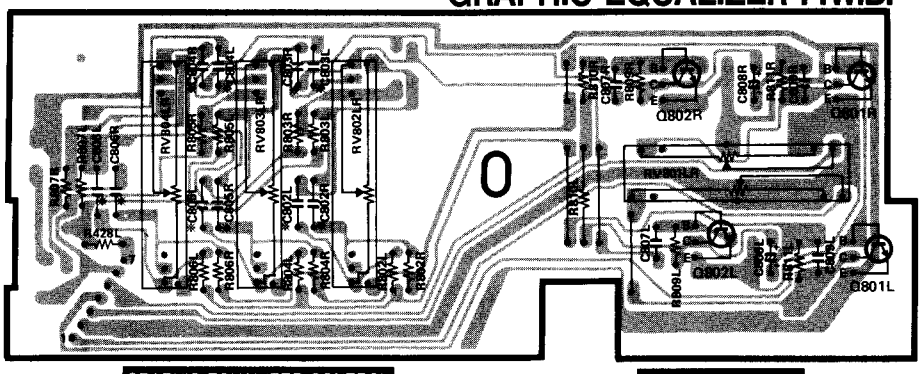
STEREO JACK

HEADPHONES P.W.B.

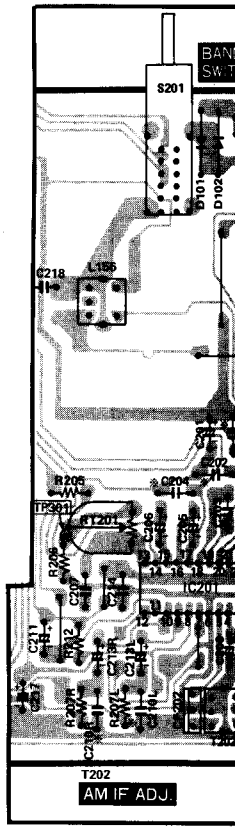
LED P.W.B.



GRAPHIC EQUALIZER P.W.B.



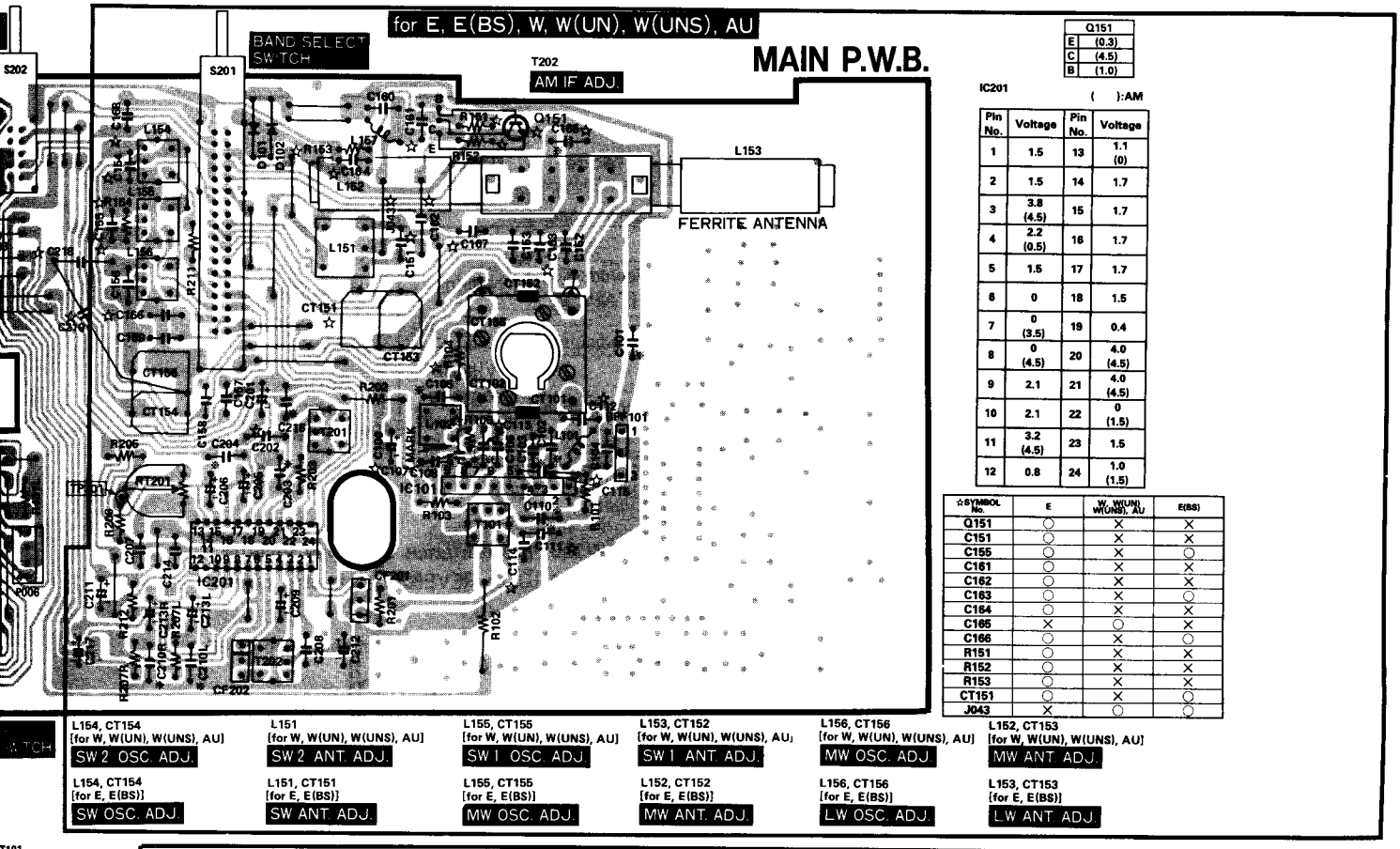
	E	C	B
Q401	0	5.0	0.6
Q402	4.7	4.8	4.2
Q403LR	0	0	0
Q404LR	0	0	0.5
Q405LR	0.3	2.3	0.9
Q406	0	0	0
Q501	0	0	0.6
Q502	8.3	8.3	7.7
Q503	5.3	9.0	6.0
Q801LR	0	0	0
Q802LR	0	1.9	0.6



LA1186N	LA1810	LA4555	TA7784P	2SA844E 2SC945PA HIT8050C	1N4148 HZ6C1	1N4002
9 ~ 1	1 ~ 12, 24 ~ 13	1 ~ 6, 12 ~ 7	1 ~ 8, 16 ~ 9	E C B	K A	K A

pacitor.
que a conducteur axial.

The circuit symbol (☆ means difference for destination. (Refer to the table in the drowing)
Le symbole de circuit (☆) signifie gu'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

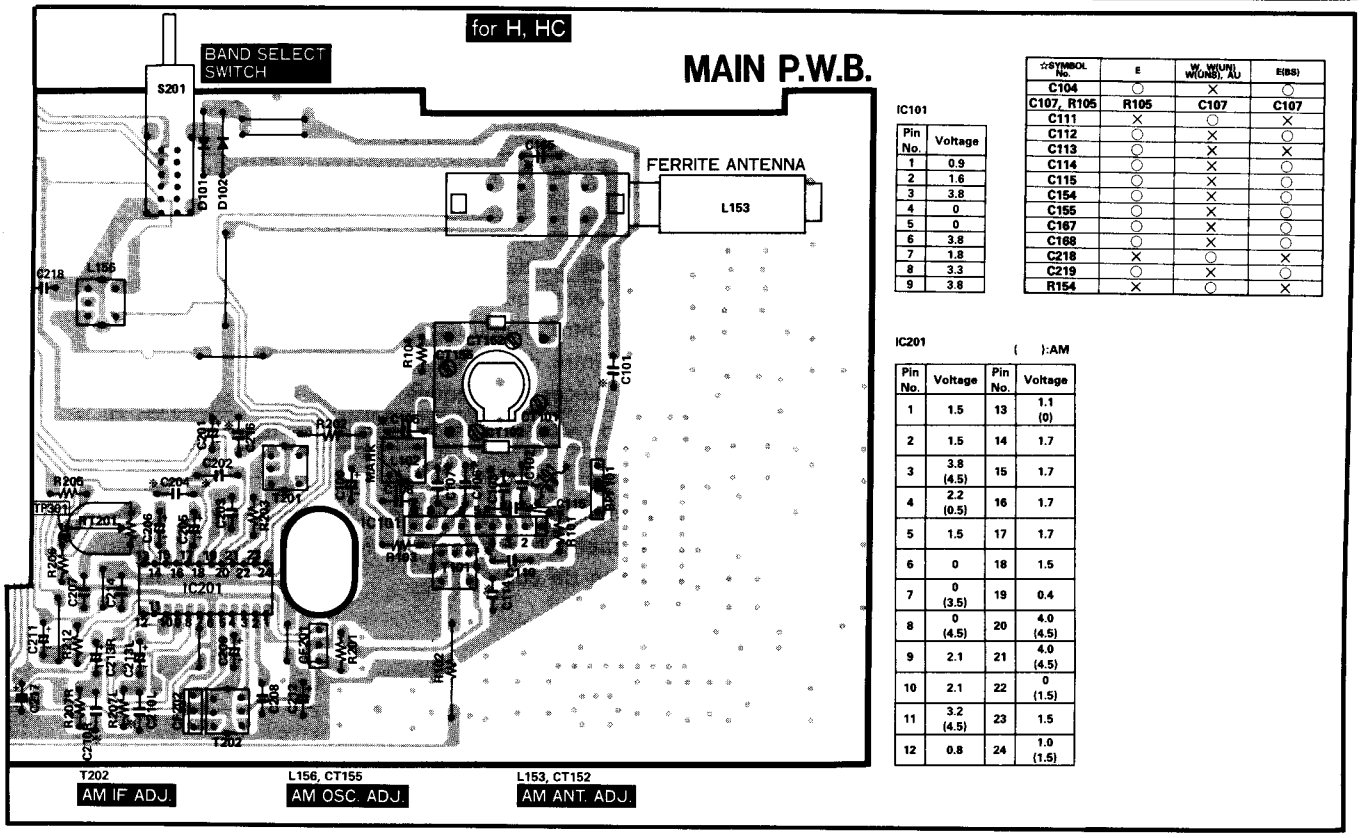
Pin No.	Voltage	Pin No.	Voltage
1	1.5	13	1.1 (0)
2	1.5	14	1.7
3	3.8 (4.5)	15	1.7
4	2.2 (0.5)	16	1.7
5	1.5	17	1.7
6	0	18	1.5
7	0 (3.5)	19	0.4
8	0 (4.5)	20	4.0 (4.5)
9	2.1	21	4.0 (4.5)
10	2.1	22	0 (1.5)
11	3.2 (4.5)	23	1.5
12	0.8	24	1.0 (1.5)

☆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.

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

E	C	B
0	5.0	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
5.3	9.0	6.0
0	0	0
0	1.9	0.6



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

☆SYMBOL No.	E	W, W(UN), W(UNS), AU	E(BS)
C104	○	×	○
C107, R105	R105	C107	C107
C111	×	○	×
C112	○	×	○
C113	○	×	×
C114	○	×	○
C115	○	×	○
C154	○	×	○
C155	○	×	○
C167	○	×	○
C168	○	×	○
C218	×	○	×
C219	○	×	○
R154	×	○	×

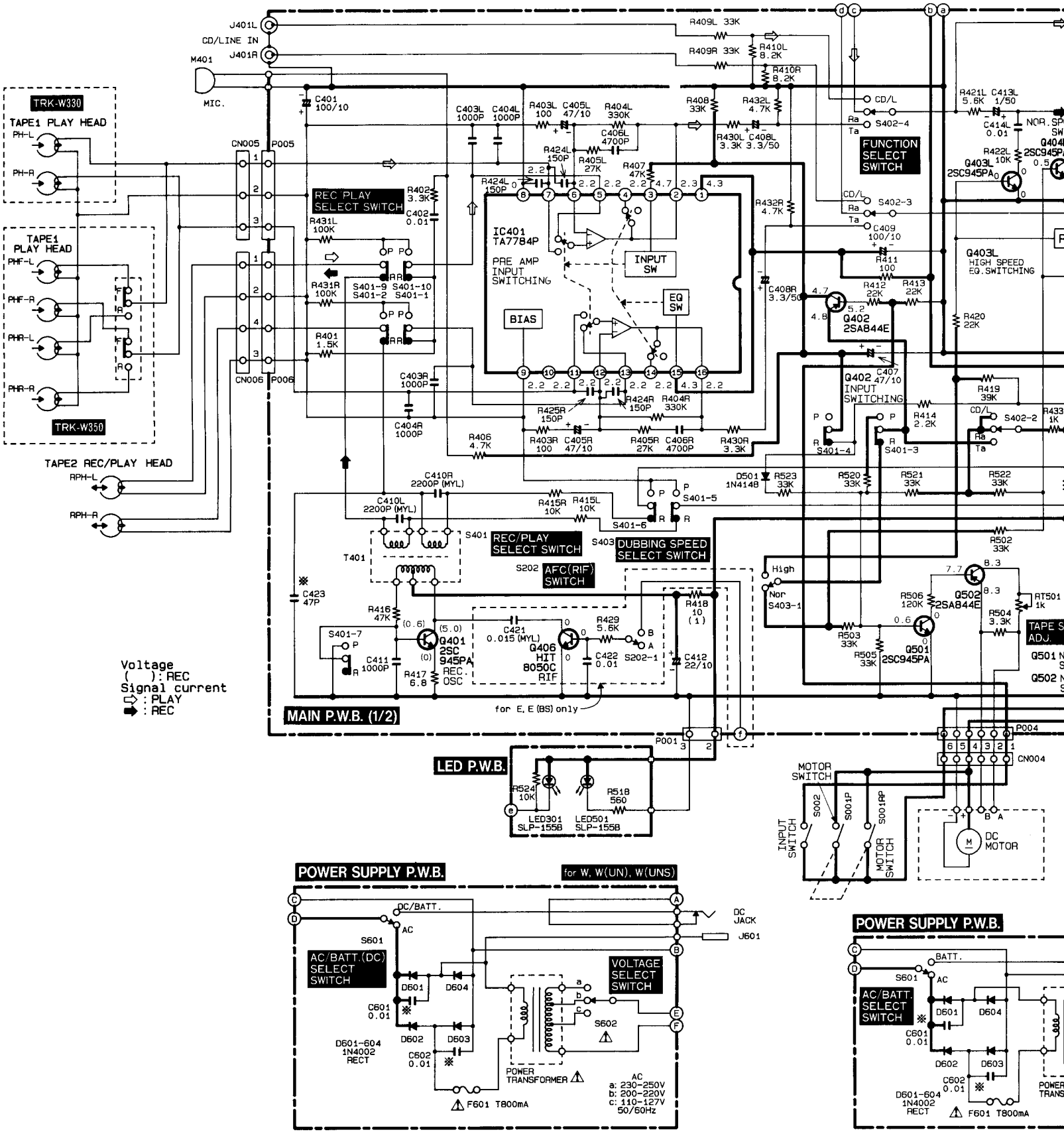
IC201 ( ):AM

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)

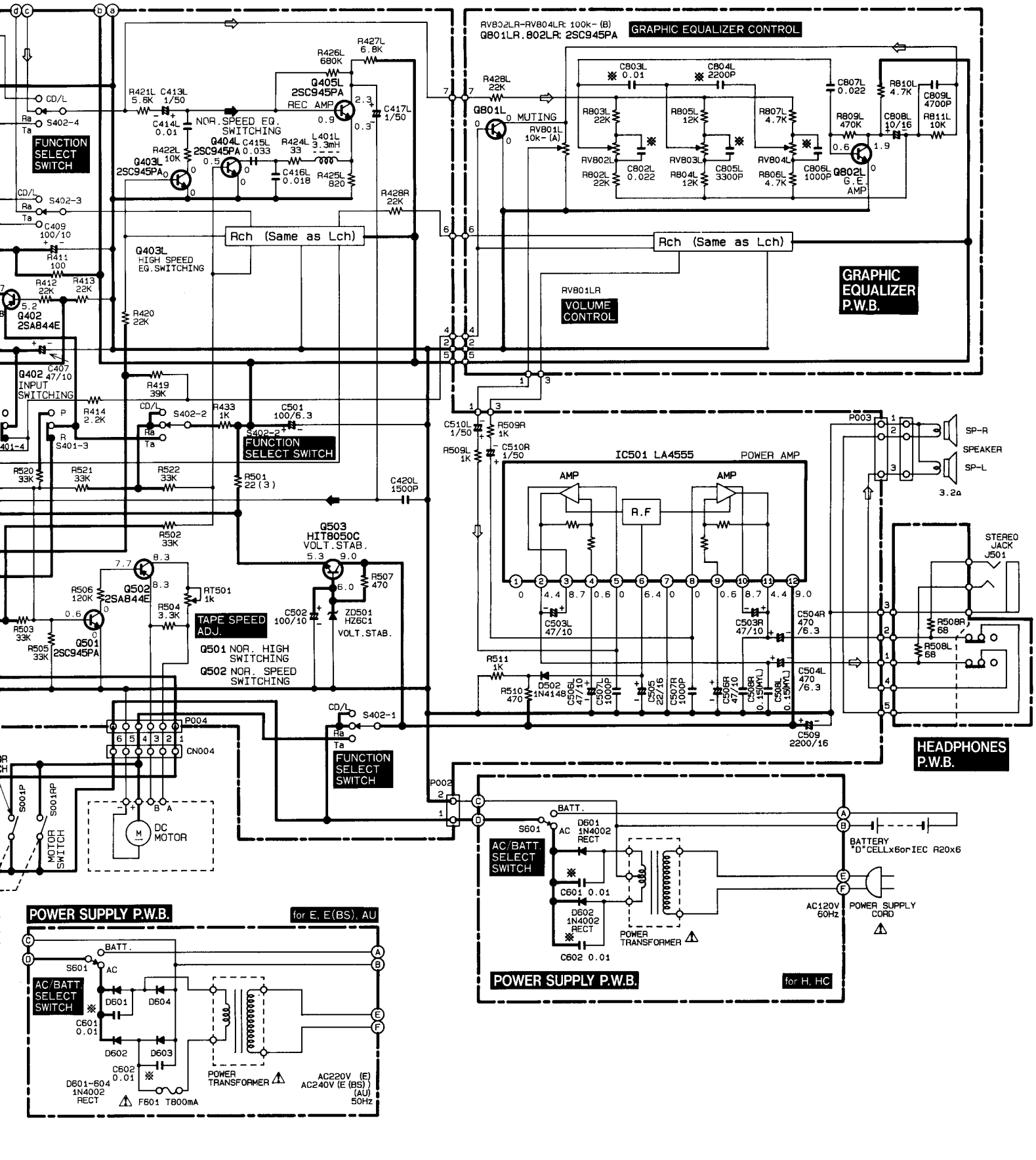
T202 AM IF ADJ.
L156, CT155 AM OSC. ADJ.
L153, CT152 AM ANT. ADJ.

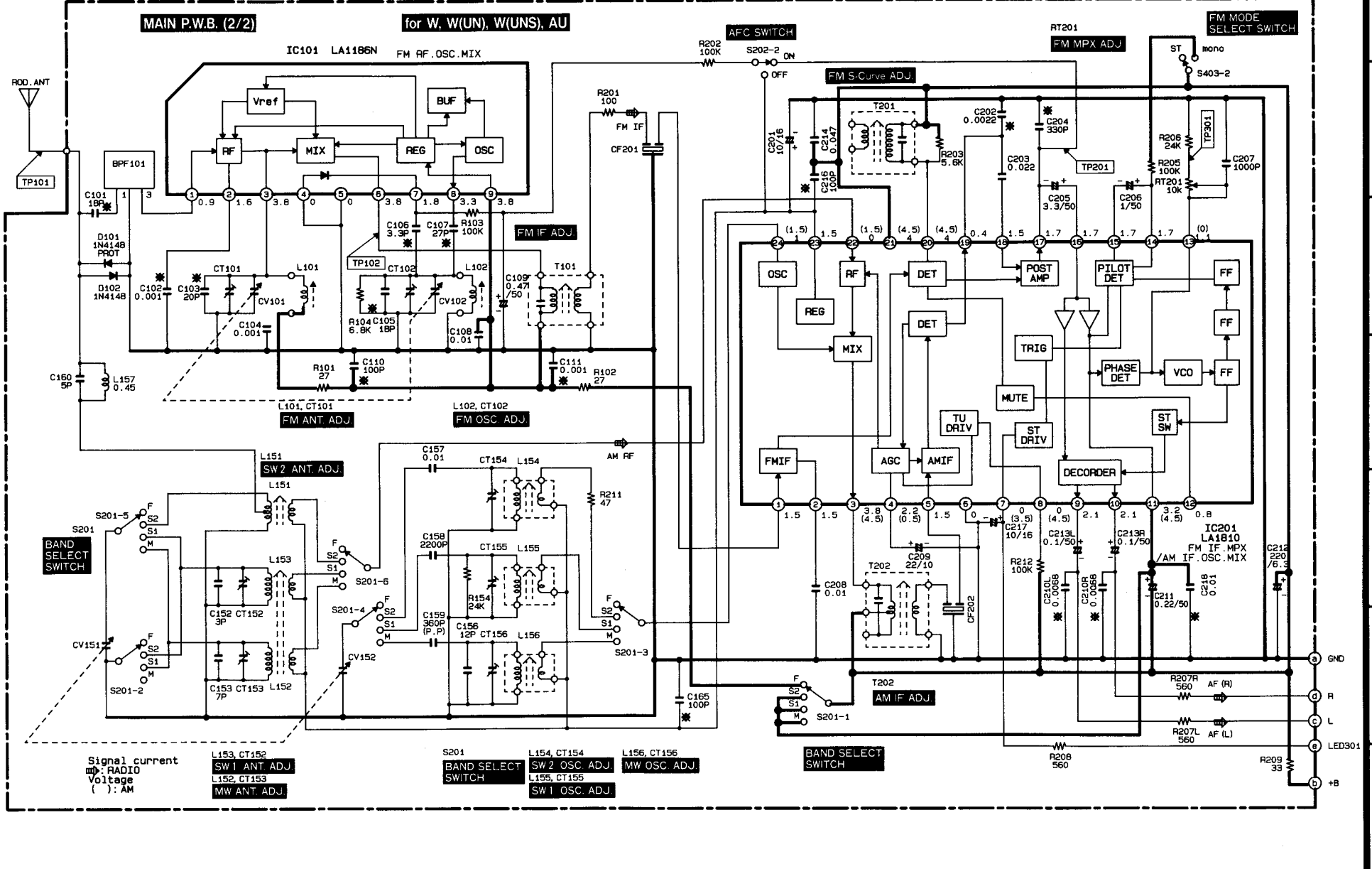
CIRCUIT DIAGRAM · PLAN DE CIRCUIT

〔▬ : +B〕 ※ : Axial lead cylindrical ceramic capacitor.

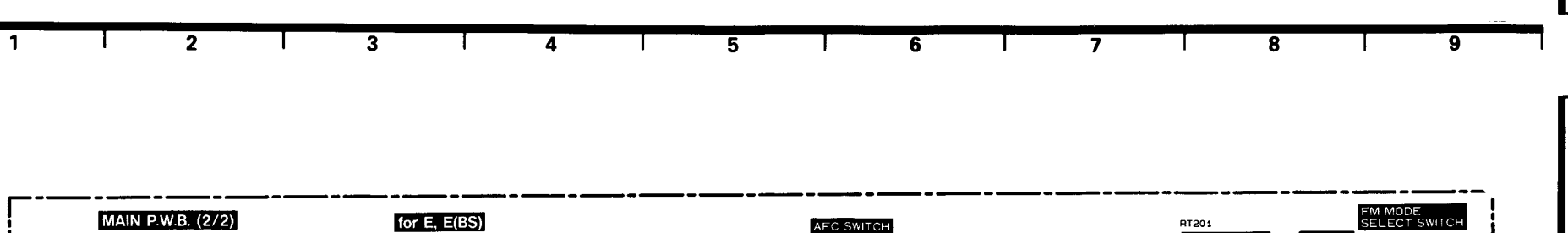


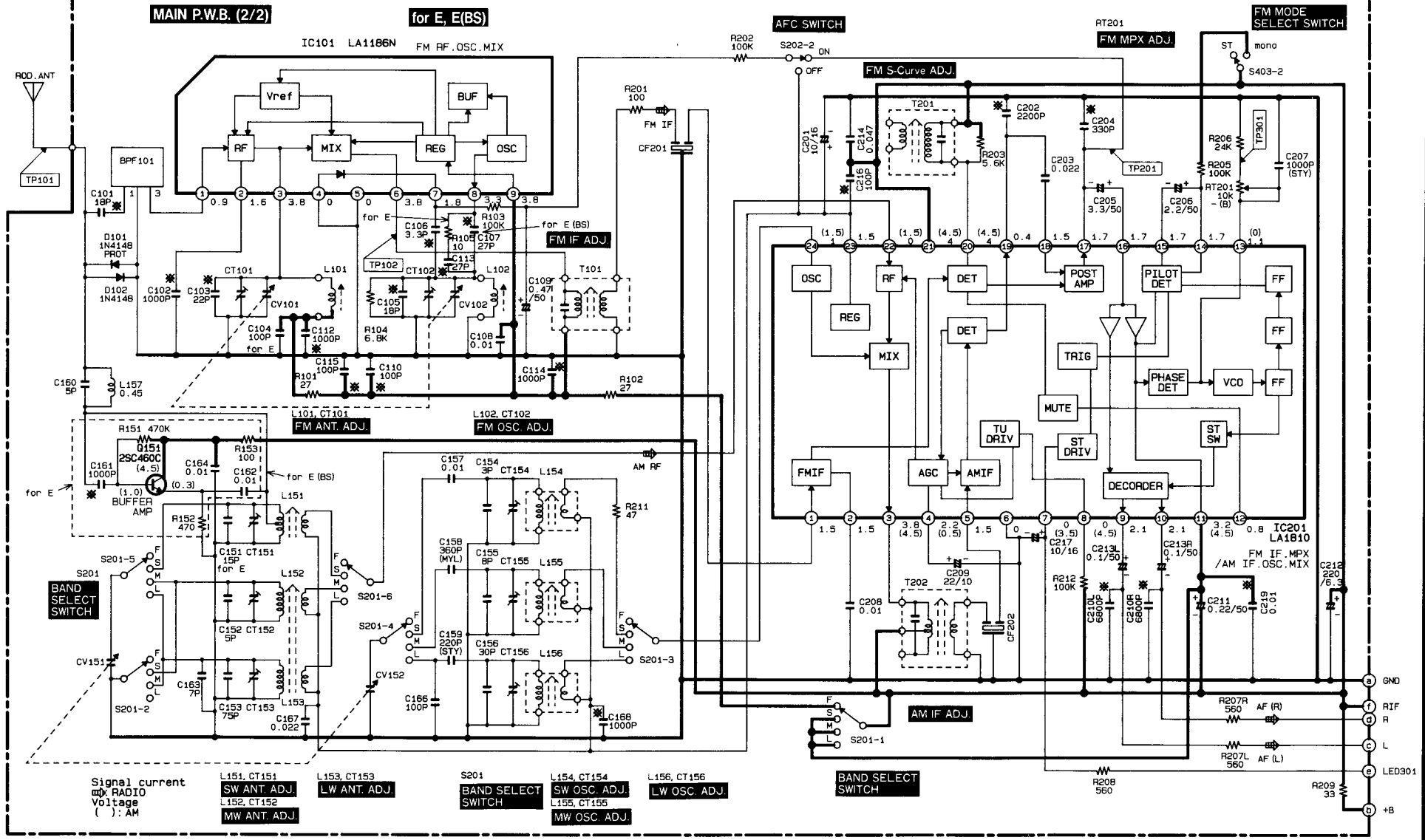
ylindrical ceramic capacitor. ※ : Condensateur ceramique clindrique a conducteur axial.

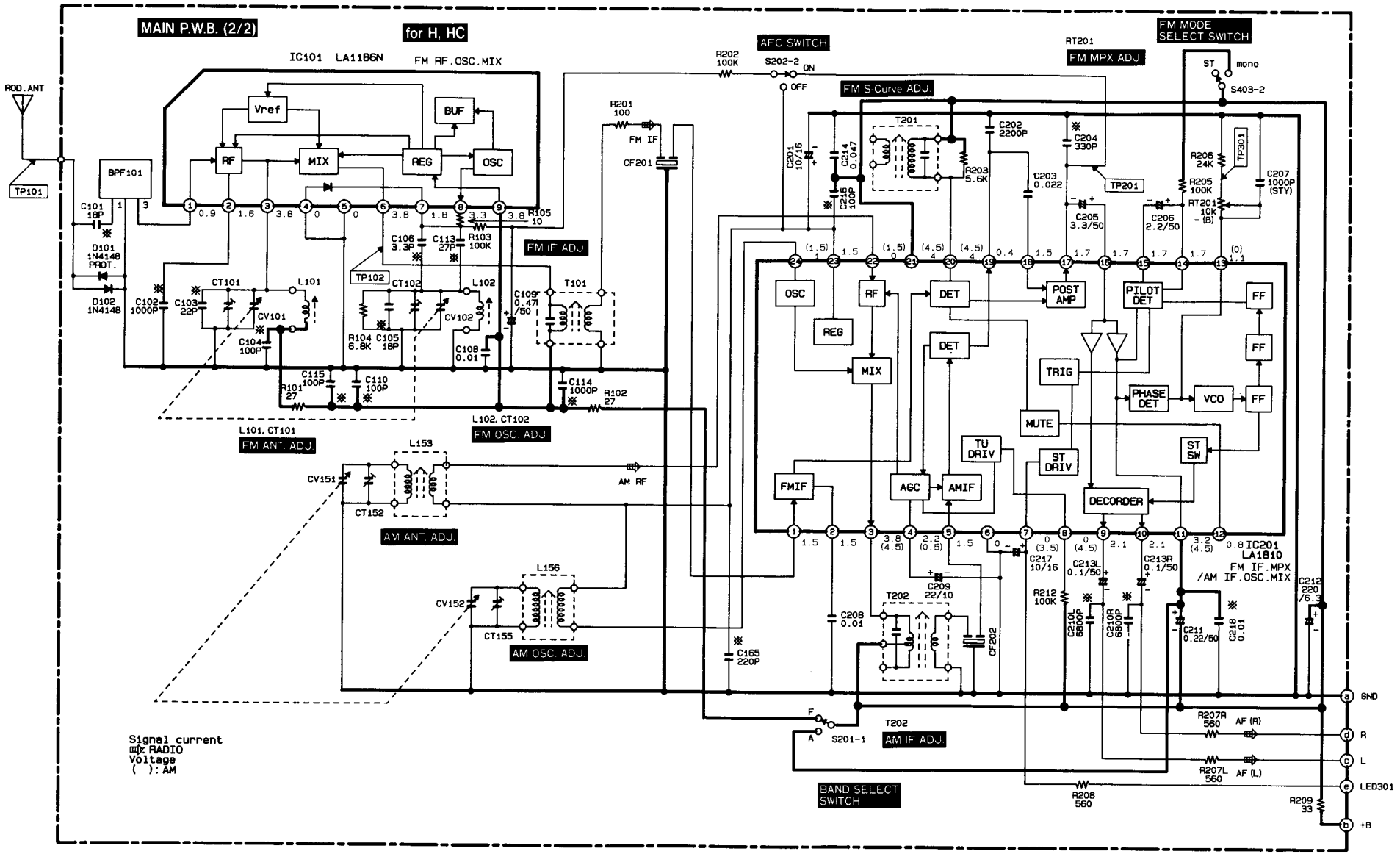



MAIN P.W.B. (2/2)
for W, W(UN), W(UNS), AU
IC101 LA1186N FM RF.OSC.MIX
AFC SWITCH
FM MODE SELECT SWITCH
FM MPX ADJ
FM S-Curve ADJ.
FM IF ADJ.
ROD.ANT
TP101
BPF101
Vref
BUF
RF
MIX
REG
OSC
FM IF
CF201
TP102
TP201
TP301
FM ANT. ADJ.
L101, CT101
FM OSC. ADJ.
L102, CT102
AM RF
L151
SW 2 ANT. ADJ.
BAND SELECT SWITCH
S201
CV151
CV152
CV101
CV102
L153, CT152
SW 1 ANT. ADJ.
L152, CT153
MW ANT. ADJ.
L154, CT154
SW 2 OSC. ADJ.
L155, CT155
SW 1 OSC. ADJ.
L156, CT156
MW OSC. ADJ.
T202
AM IF ADJ.
OSC
REG
MIX
AF
DET
AGC
AMIF
FMIF
POST AMP
PILOT DET
TRIG
PHASE DET
VCO
MUTE
TU DRIV
ST DRIV
ST SW
FF
DECORDER
IC201
LA1810
FM IF.MPX
/AM IF.OSC.MIX
AF (R)
AF (L)
GND
R
L
LED301
+B
Signal current
▷: RADIO
Voltage
( ): AM

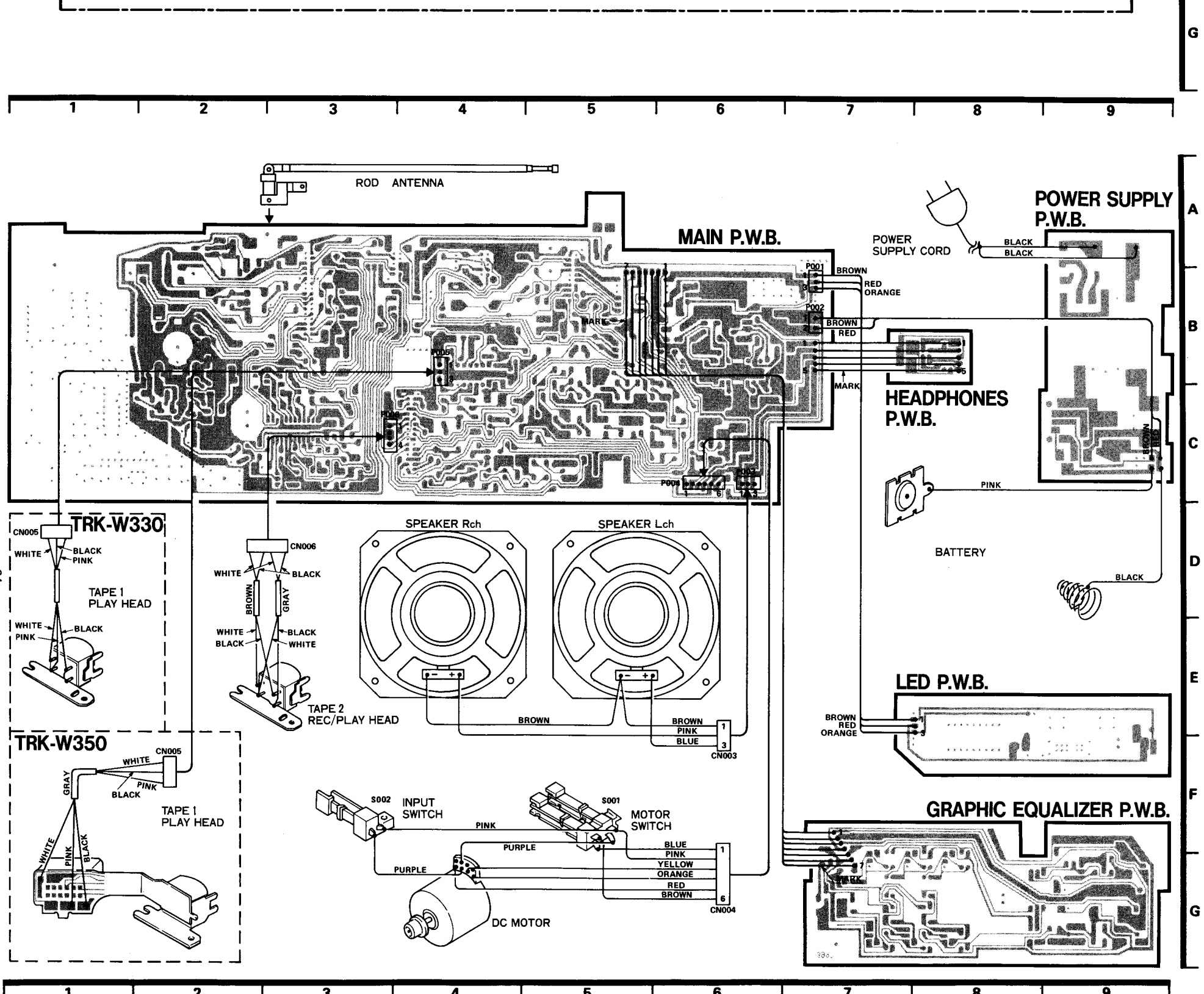
TRK-W350


MAIN P.W.B. (2/2)
for E, E(BS)
AFC SWITCH
FM MODE SELECT SWITCH
FM MPX ADJ
FM S-Curve ADJ.
FM IF ADJ.
TP101
BPF101
TP102
TP201
TP301
FM ANT. ADJ.
L101, CT101
FM OSC. ADJ.
L102, CT102
AM RF
L151
SW 2 ANT. ADJ.
BAND SELECT SWITCH
S201
CV151
CV152
CV101
CV102
L153, CT152
SW 1 ANT. ADJ.
L152, CT153
MW ANT. ADJ.
L154, CT154
SW 2 OSC. ADJ.
L155, CT155
SW 1 OSC. ADJ.
L156, CT156
MW OSC. ADJ.
T202
AM IF ADJ.
IC201
LA1810
FM IF.MPX
/AM IF.OSC.MIX
AF (R)
AF (L)
GND
R
L
LED301
+B
Signal current
▷: RADIO
Voltage
( ): AM

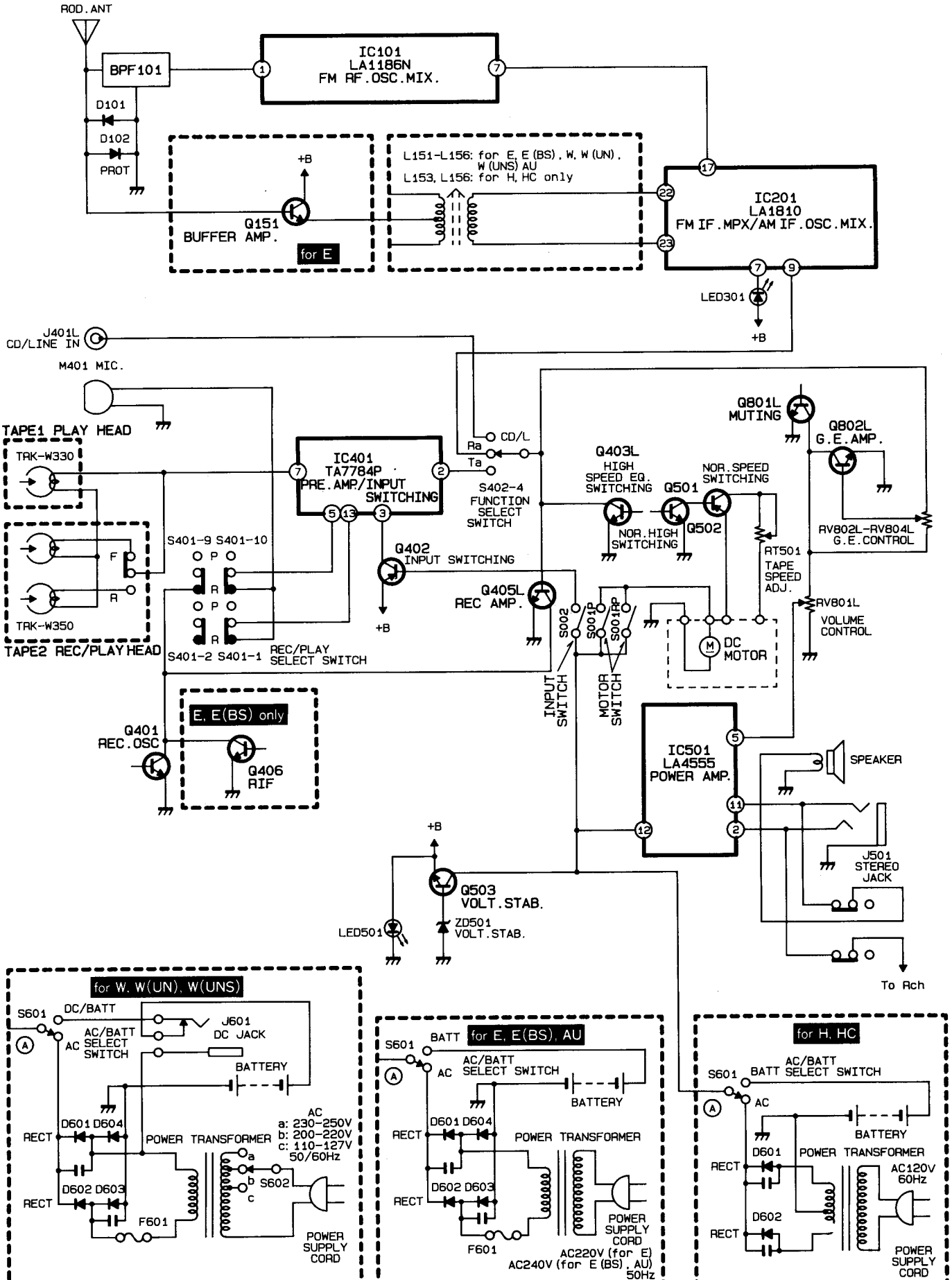

MAIN P.W.B. (2/2)
for E, E(BS)
IC101 LA1186N
FM RF.OSC.MIX
ROD.ANT
TP101
BPF101
Vref
BUF
RF
MIX
REG
OSC
AFC SWITCH
S202-2
ON
OFF
FM S-Curve ADJ.
FM IF
CF201
FM MPX ADJ.
RT201
FM MODE SELECT SWITCH
ST
mono
S403-2
FM IF ADJ.
TP102
TP201
TP301
D101 1N4148 PROT
D102 1N4148
CT101
CV101
L101
CT102
CV102
L102
T101
T201
T202
FM ANT. ADJ.
L101, CT101
FM OSC. ADJ.
L102, CT102
AM RF
AM IF ADJ.
AM IF.OSC.MIX
BUFFER AMP
Q151 2SC460C
BAND SELECT SWITCH
S201
S201-1
S201-2
S201-3
S201-4
S201-5
S201-6
CV151
CV152
CT151
CT152
CT153
CT154
CT155
CT156
L151
L152
L153
L154
L155
L156
SW ANT. ADJ.
MW ANT. ADJ.
LW ANT. ADJ.
SW OSC. ADJ.
MW OSC. ADJ.
LW OSC. ADJ.
IC201 LA1810
FM IF.MPX /AM IF.OSC.MIX
OSC
REG
RF
MIX
DET
POST AMP
PILOT DET
FF
TRIG
PHASE DET
VCO
MUTE
TU DRIV
ST DRIV
ST SW
FMIF
AGC
AMIF
DECORDER
GND
RIF
R
L
LED301
+B
AF (R)
AF (L)
Signal current
RADIO
Voltage
( ): AM


MAIN P.W.B. (2/2)
for H, HC
IC101 LA1186N FM RF.OSC.MIX
ROD.ANT
TP101
BPF101
Vref
BUF
RF
MIX
REG
OSC
FM IF ADJ.
FM ANT. ADJ.
L101, CT101
FM OSC. ADJ.
L102, CT102
AM ANT. ADJ.
AM OSC. ADJ.
AFC SWITCH
S202-2
ON
OFF
FM S-Curve ADJ.
FM MPX ADJ.
FM MODE SELECT SWITCH
ST
mono
S403-2
FM IF
AM RF
IC201 LA1810
FM IF.MPX /AM IF.OSC.MIX
OSC
REG
RF
MIX
DET
POST AMP
PILOT DET
FF
TRIG
PHASE DET
VCO
MUTE
TU DRIV
ST DRIV
ST SW
DECORDER
FMIF
AGC
AMIF
BAND SELECT SWITCH
S201-1
AM IF ADJ.
AF (R)
AF (L)
LED301
GND
R
L
+B
Signal current
RADIO
Voltage
( ): AM

WIRING DIAGRAM · SCHÉMA DE CÂBLAGE



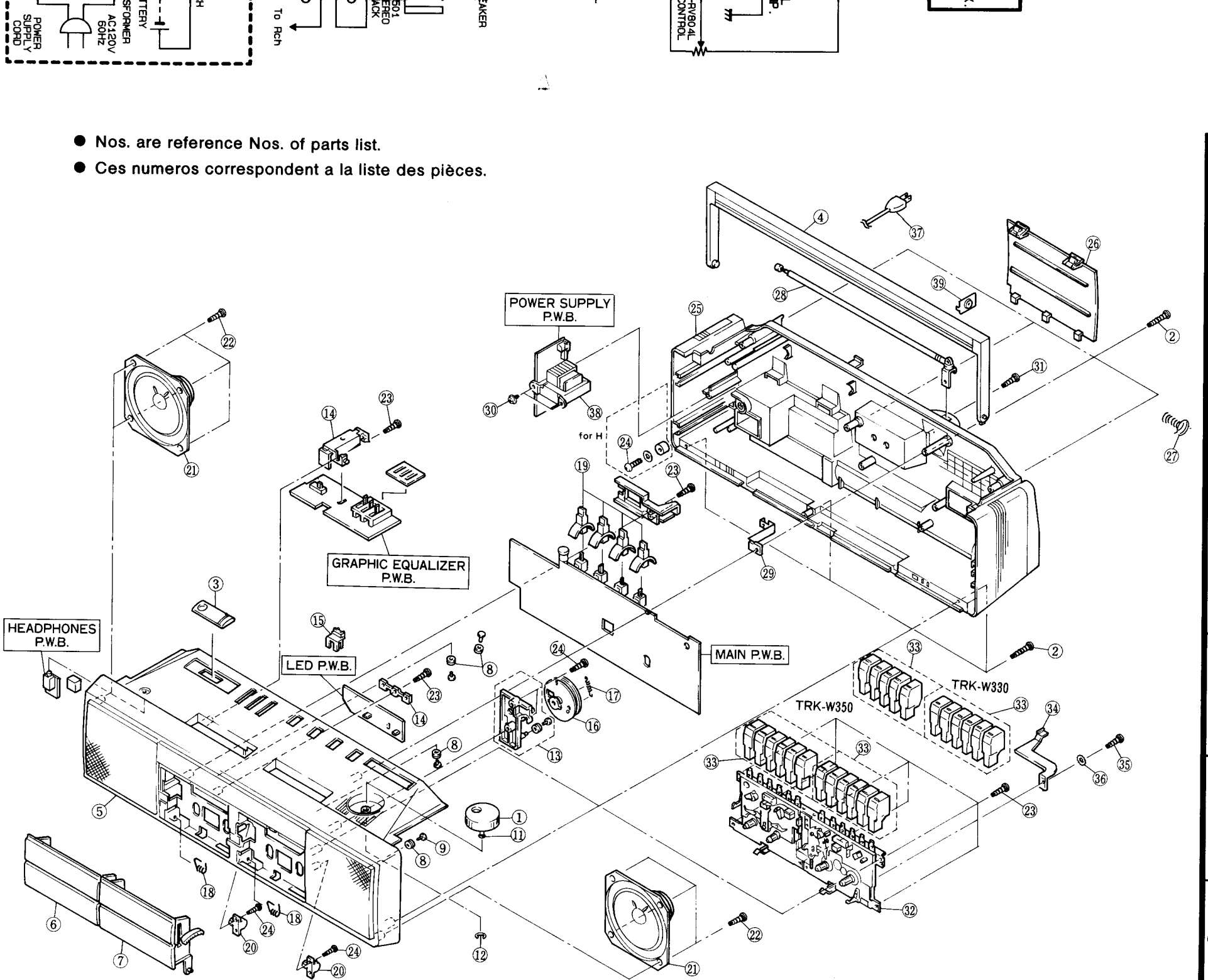
BLOCK DIAGRAM · SCHÉMA



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

EXPLODED VIEW · VUE EXPLOSEE
(Cabinet) (Coffret)

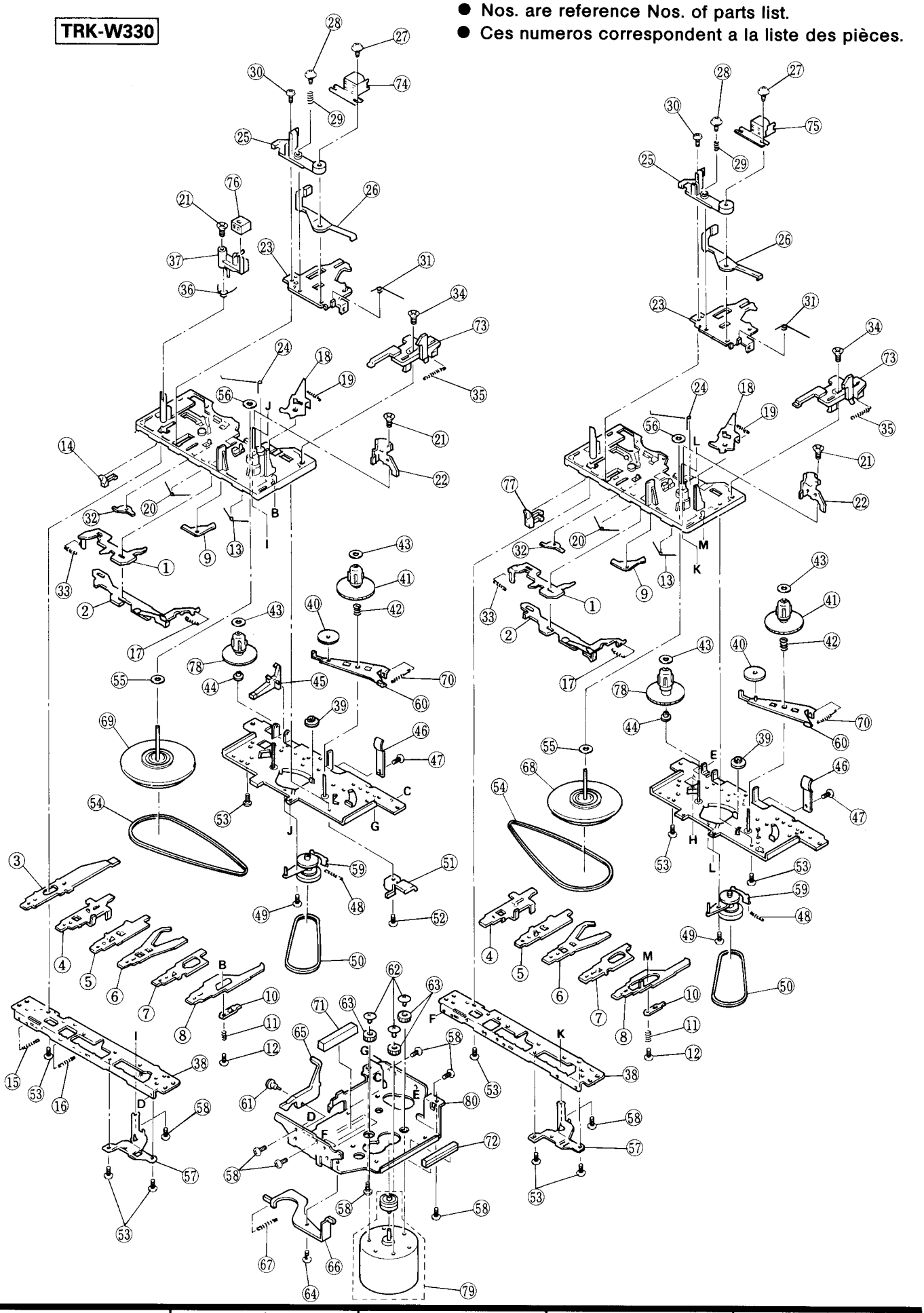
- Nos. are reference Nos. of parts list.
- Ces numeros correspondent a la liste des pièces.



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

TRK-W330

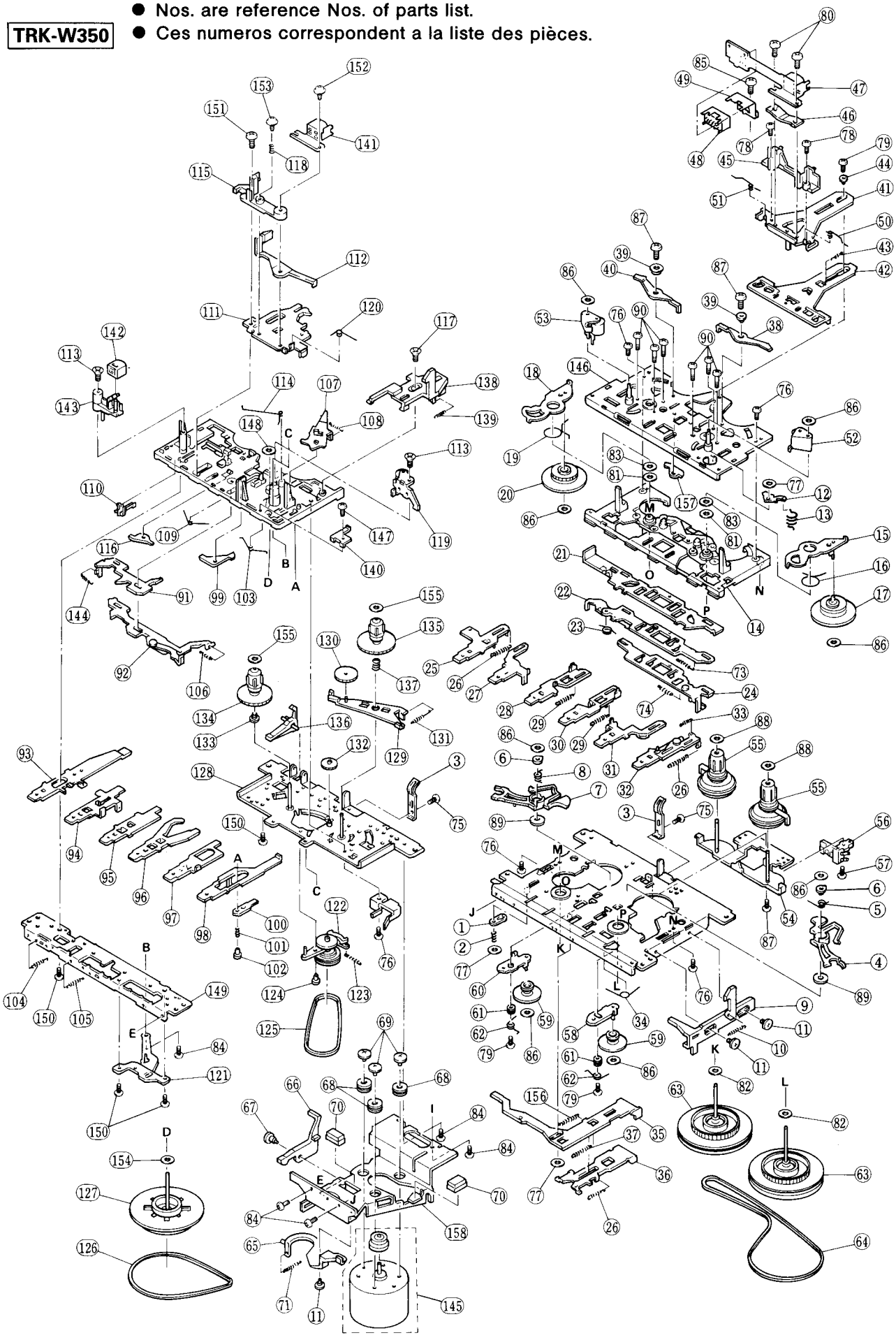
- Nos. are reference Nos. of parts list.
- Ces numeros correspondent a la liste des pièces.



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

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

TRK-W350



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

SYMBOL No.	PART No.	DESCRIPTION
		CAPACITORS
C101	0230618	CC 18PF ±5% 50V
C102	0240045	CC 1000PF ±10% 50V
C103	0208668	CD 22PF ±5% 50V [for H, HC, E, E(BS)]
	0230619	CC 20PF ±5% 50V [for AU, W, W(UN), W(UNS)]
C104	0240033	CC 100PF ±10% 50V [for E, E(BS), H, HC]
C105	0230688	CC 18PF ±5% 50V
C106	0230646	CC 3.3PF ±10% 50V
C107	0230622	CC 27PF ±5% 50V [except E, H, HC]
C108	0244171	CD 0.01 μF +80% −20% 50V
C109	0252805	EL 0.47 μF ±20% 50V
C110	0240033	CC 100PF ±10% 50V
C111	0240045	CC 1000PF ±10% 50V [except E, E(BS), H, HC]
C112	0240045	CC 1000PF ±10% 50V [for E, E(BS)]
C113	0230622	CC 27PF ±5% 50V [for E, H, HC]
C114	0240045	CC 1000PF ±10% 50V [for E, E(BS), H, HC]
C115	0240033	CC 100PF ±10% 50V [for E, E(BS), H, HC]
C151	0208664	CD 15PF ±5% 50V [for E]
C152	0208635	CD 5PF ±0.25PF 50V [for E, E(BS)]
	0208633	CD 3PF ±0.25PF 50V [for AU, W, W(UN), W(UNS)]
C153	0240030	CD 75PF ±10% 50V [for E, E(BS)]
C153	0208647	CD 7PF ±0.5PF 50V [for AU, W, W(UN), W(UNS)]
C154	0208633	CD 3PF ±0.25PF 50V [for E, E(BS)]
C155	0208648	CD 8PF ±0.5PF 50V [for E, E(BS)]
C156	0230614	CD 12PF ±5% 50V [for AU, W, W(UN), W(UNS)]
	0230623	CD 30PF ±5% 50V [for E, E(BS)]
C157	0209737	CD 0.01 μF ±10% 50V [except H, HC]
C158	0274013	MF 2200PF ±10% 50V [for AU, W, W(UN), W(UNS)]
	0268321	MF 360PF ±5% 100V [for E, E(BS)]
C159	0221319	ST 220PF ±5% 50V [for E, E(BS)]
	0268321	PP 360PF ±5% 100V [for AU, W, W(UN), W(UNS)]
C160	0208635	CD 5PF ±0.25PF 50V [except H, HC]
C161	0240045	CC 1000PF ±10% 50V [for E]
C162	0240061	CC 0.01 μF ±30% 16V [for E]
C163	0208647	CD 7PF ±0.5PF 50V [for E, E(BS)]
C164	0240061	CC 0.01 μF ±30% 16V [for E]
C165	0240037	CC 220PF ±10% 50V [for H, HC]
	0240033	CC 100PF ±10% 50V [for AU, W, W(UN), W(UNS)]
C166	0208684	CD 100PF ±5% 50V [for E, E(BS)]
C167	0244173	CD 0.022 μF +80% −20% 50V [for E, E(BS)]
C168	0240045	CC 1000PF ±10% 50V [for E, E(BS)]
C201	0252521	EL 10 μF ±20% 16V
C202	0240053	CC 2200PF ±20% 16V
C203	0244173	CD 0.022 μF +80% −20% 50V
C204	0240039	CC 330PF ±10% 50V
C205	0252813	EL 3.3 μF ±20% 50V
C206	0252812	EL 2.2 μF ±20% 50V
C207	0221335	ST 1000PF ±5% 50V
C208	0244171	CD 0.01 μF +80% −20% 50V
C209	0252322	EL 22 μF ±20% 10V
C210LR	0240059	CC 6800PF ±30% 16V
C211	0252802	EL 0.22 μF ±20% 50V
C212	0252232	EL 220 μF ±20% 6.3V
C213LR	0252801	EL 0.1 μF ±20% 50V
C214	0209175	CD 0.047 μF +80% −20% 50V
C216	0240033	CC 100PF ±10% 50V
C217	0252521	EL 10 μF ±20% 16V
C218	0240061	CC 0.01 μF ±30% 16V [except E, E(BS)]
C219	0240061	CC 0.01 μF ±30% 16V [for E, E(BS)]
C401	0252331	EL 100 μF ±20% 10V
C402	0244171	CD 0.01 μF +80% −20% 50V
C403LR	0209731	CD 1000PF ±10% 50V
C404LR	0209731	CD 1000PF ±10% 50V
C405LR	0252325	EL 47 μF ±20% 10V
C406LR	0209735	CD 4700PF ±10% 50V
C407	0252325	EL 47 μF ±20% 10V
C408LR	0252813	EL 3.3 μF ±20% 50V
C409	0252331	EL 100 μF ±20% 10V
C410LR	0274013	MF 2200PF ±10% 50V
C411	0209731	CD 1000PF ±10% 50V
C412	0252322	EL 22 μF ±20% 10V
C413LR	0252811	EL 1 μF ±20% 50V
C414LR	0209761	CD 0.01 μF ±20% 25V
C415LR	0209764	CD 0.033 μF ±20% 25V
C416LR	0240215	CD 0.018 μF ±20% 25V
C417LR	0252811	EL 1 μF ±20% 50V
C420LR	0209732	CD 1500PF ±10% 50V
C421	0275012	MF 0.015 μF ±10% 50V [for E, E(BS)]
C422	0244171	CD 0.01 μF +80% −20% 50V [for E, E(BS)]
C423	0230628	CC 47PF ±5% 50V
C424LR	0248688	CD 150PF ±5% 50V
C425LR	0248688	CD 150PF ±5% 50V
C501	0252231	EL 100 μF ±20% 6.3V
C502	0252331	EL 100 μF ±20% 10V
C503LR	0252325	EL 47 μF ±20% 10V
C504LR	0252235	EL 470 μF ±20% 6.3V
C505	0252522	EL 22 μF ±20% 16V
C506LR	0252325	EL 47 μF ±20% 10V
C507LR	0209161	CD 1000PF +80% −20% 50V
C508LR	0276012	MF 0.15 μF ±10% 50V
C509	0252542	EL 2200 μF ±20% 16V
C510LR	0252811	EL 1 μF ±20% 50V
C601	0244171	CC 0.01 μF +80% −20% 50V
C602	0244171	CC 0.01 μF +80% −20% 50V
C802LR	0240066	CC 0.022 μF +80% −20% 25V
C803LR	0240061	CC 0.01 μF ±30% 16V
C804LR	0240053	CC 2200PF ±20% 16V
C805LR	0240055	CC 3300PF ±20% 16V
C806LR	0240045	CC 1000PF ±10% 50V
C807LR	0244173	CD 0.022 μF +80% −20% 50V
C808LR	0252521	EL 10 μF ±20% 16V
C809LR	0209735	CD 4700PF ±10% 50V
		RESISTORS
R101	0113577	CF 27Ω ±5% SRD1/6P
R102	0113577	CF 27Ω ±5% SRD1/6P
R103	0113663	CF 100KΩ ±5% SRD1/6P
R104	0113635	CF 6.8KΩ ±5% SRD1/6P
R105	0113567	CF 10Ω ±5% SRD1/6P [for E, H, HC]
R151	0113679	CF 470KΩ ±5% SRD1/6P [for E]
R152	0113607	CF 470Ω ±5% SRD1/6P [for E]
R153	0113591	CF 100Ω ±5% SRD1/6P [for E]
R154	0113648	CF 24KΩ ±5% SRD1/6P [for W, W(UN), W(UNS), AU]
R201	0113591	CF 100Ω ±5% SRD1/6P
R202	0113663	CF 100KΩ ±5% SRD1/6P
R203	0113633	CF 5.6KΩ ±5% SRD1/6P
R205	0113663	CF 100KΩ ±5% SRD1/6P
R206	0113648	CF 24KΩ ±5% SRD1/6P
R207LR	0113609	CF 560Ω ±5% SRD1/6P
R208	0113609	CF 560Ω ±5% SRD1/6P
R209	0113579	CF 33Ω ±5% SRD1/6P
R211	0113583	CF 47Ω ±5% SRD1/6P [except H, HC]
R212	0113663	CF 100KΩ ±5% SRD1/6P
R401	0113619	CF 1.5KΩ ±5% SRD1/6P
R402	0113627	CF 3.3KΩ ±5% SRD1/6P
R403LR	0113591	CF 100Ω ±5% SRD1/6P
R404LR	0113675	CF 330KΩ ±5% SRD1/6P
R405LR	0113649	CF 27KΩ ±5% SRD1/6P
R406	0113631	CF 4.7KΩ ±5% SRD1/6P
R407	0113655	CF 47KΩ ±5% SRD1/6P
R408	0113651	CF 33KΩ ±5% SRD1/6P
R409LR	0113651	CF 33KΩ ±5% SRD1/6P
R410LR	0113637	CF 8.2KΩ ±5% SRD1/6P
R411	0113591	CF 100Ω ±5% SRD1/6P
R412	0113647	CF 22KΩ ±5% SRD1/6P
R413	0113647	CF 22KΩ ±5% SRD1/6P
R414	0113623	CF 2.2KΩ ±5% SRD1/6P
R415LR	0113639	CF 10KΩ ±5% SRD1/6P
R416	0113655	CF 47KΩ ±5% SRD1/6P

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

SYMBOL No.	PART No.	DESCRIPTION
		CAPACITORS
C101	0230618	CC 18PF ±5% 50V
C102	0240045	CC 1000PF ±10% 50V
C103	0208668	CD 22PF ±5% 50V [for H, HC, E, E(BS)]
	0230619	CC 20PF ±5% 50V [for AU, W, W(UN), W(UNS)]
C104	0240033	CC 100PF ±10% 50V [for E, E(BS), H, HC]
C105	0230688	CC 18PF ±5% 50V
C106	0230646	CC 3.3PF ±10% 50V
C107	0230622	CC 27PF ±5% 50V [except E, H, HC]
C108	0244171	CD 0.01 μF +80% −20% 50V
C109	0252805	EL 0.47 μF ±20% 50V
C110	0240033	CC 100PF ±10% 50V
C111	0240045	CC 1000PF ±10% 50V [except E, E(BS), H, HC]
C112	0240045	CC 1000PF ±10% 50V [for E, E(BS)]
C113	0230622	CC 27PF ±5% 50V [for E, H, HC]
C114	0240045	CC 1000PF ±10% 50V [for E, E(BS), H, HC]
C115	0240033	CC 100PF ±10% 50V [for E, E(BS), H, HC]
C151	0208664	CD 15PF ±5% 50V [for E]
C152	0208635	CD 5PF ±0.25PF 50V [for E, E(BS)]
	0208633	CD 3PF ±0.25PF 50V [for AU, W, W(UN), W(UNS)]
C153	0240030	CD 75PF ±10% 50V [for E, E(BS)]
C153	0208647	CD 7PF ±0.5PF 50V [for AU, W, W(UN), W(UNS)]
C154	0208633	CD 3PF ±0.25PF 50V [for E, E(BS)]
C155	0208648	CD 8PF ±0.5PF 50V [for E, E(BS)]
C156	0230614	CD 12PF ±5% 50V [for AU, W, W(UN), W(UNS)]
	0230623	CD 30PF ±5% 50V [for E, E(BS)]
C157	0209737	CD 0.01 μF ±10% 50V [except H, HC]
C158	0274013	MF 2200PF ±10% 50V [for AU, W, W(UN), W(UNS)]
	0268321	MF 360PF ±5% 100V [for E, E(BS)]
C159	0221319	ST 220PF ±5% 50V [for E, E(BS)]
	0268321	PP 360PF ±5% 100V [for AU, W, W(UN), W(UNS)]
C160	0208635	CD 5PF ±0.25PF 50V [except H, HC]
C161	0240045	CC 1000PF ±10% 50V [for E]
C162	0240061	CC 0.01 μF ±30% 16V [for E]
C163	0208647	CD 7PF ±0.5PF 50V [for E, E(BS)]
C164	0240061	CC 0.01 μF ±30% 16V [for E]
C165	0240037	CC 220PF ±10% 50V [for H, HC]
	0240033	CC 100PF ±10% 50V [for AU, W, W(UN), W(UNS)]
C166	0208684	CD 100PF ±5% 50V [for E, E(BS)]
C167	0244173	CD 0.022 μF +80% −20% 50V [for E, E(BS)]
C168	0240045	CC 1000PF ±10% 50V [for E, E(BS)]
C201	0252521	EL 10 μF ±20% 16V
C202	0240053	CC 2200PF ±20% 16V
C203	0244173	CD 0.022 μF +80% −20% 50V
C204	0240039	CC 330PF ±10% 50V
C205	0252813	EL 3.3 μF ±20% 50V
C206	0252812	EL 2.2 μF ±20% 50V
C207	0221335	ST 1000PF ±5% 50V
C208	0244171	CD 0.01 μF +80% −20% 50V
C209	0252322	EL 22 μF ±20% 10V
C210LR	0240059	CC 6800PF ±30% 16V
C211	0252802	EL 0.22 μF ±20% 50V
C212	0252232	EL 220 μF ±20% 6.3V
C213LR	0252801	EL 0.1 μF ±20% 50V
C214	0209175	CD 0.047 μF +80% −20% 50V
C216	0240033	CC 100PF ±10% 50V
C217	0252521	EL 10 μF ±20% 16V
C218	0240061	CC 0.01 μF ±30% 16V [except E, E(BS)]
C219	0240061	CC 0.01 μF ±30% 16V [for E, E(BS)]
C401	0252331	EL 100 μF ±20% 10V
C402	0244171	CD 0.01 μF +80% −20% 50V
C403LR	0209731	CD 1000PF ±10% 50V
C404LR	0209731	CD 1000PF ±10% 50V
C405LR	0252325	EL 47 μF ±20% 10V
C406LR	0209735	CD 4700PF ±10% 50V
C407	0252325	EL 47 μF ±20% 10V
C408LR	0252813	EL 3.3 μF ±20% 50V
C409	0252331	EL 100 μF ±20% 10V
C410LR	0274013	MF 2200PF ±10% 50V
C411	0209731	CD 1000PF ±10% 50V
C412	0252322	EL 22 μF ±20% 10V
C413LR	0252811	EL 1 μF ±20% 50V
C414LR	0209761	CD 0.01 μF ±20% 25V
C415LR	0209764	CD 0.033 μF ±20% 25V
C416LR	0240215	CD 0.018 μF ±20% 25V
C417LR	0252811	EL 1 μF ±20% 50V
C420LR	0209732	CD 1500PF ±10% 50V
C421	0275012	MF 0.015 μF ±10% 50V [for E, E(BS)]
C422	0244171	CD 0.01 μF +80% −20% 50V [for E, E(BS)]
C423	0230628	CC 47PF ±5% 50V
C424LR	0248688	CD 150PF ±5% 50V
C425LR	0248688	CD 150PF ±5% 50V
C501	0252231	EL 100 μF +20% 6.3V
C502	0252331	EL 100 μF ±20% 10V
C503LR	0252325	EL 47 μF ±20% 10V
C504LR	0252235	EL 470 μF ±20% 6.3V
C505	0252522	EL 22 μF ±20% 16V
C506LR	0252325	EL 47 μF ±20% 10V
C507LR	0209161	CD 1000PF +80% −20% 50V
C508LR	0276012	MF 0.15 μF ±10% 50V
C509	0252542	EL 2200 μF ±20% 16V
C510LR	0252811	EL 1 μF ±20% 50V
C601	0244171	CC 0.01 μF +80% −20% 50V
C602	0244171	CC 0.01 μF +80% −20% 50V
C802LR	0240066	CC 0.022 μF +80% −20% 25V
C803LR	0240061	CC 0.01 μF ±30% 16V
C804LR	0240053	CC 2200PF ±20% 16V
C805LR	0240055	CC 3300PF ±20% 16V
C806LR	0240045	CC 1000PF ±10% 50V
C807LR	0244173	CD 0.022 μF +80% −20% 50V
C808LR	0252521	EL 10 μF ±20% 16V
C809LR	0209735	CD 4700PF ±10% 50V
		RESISTORS
R101	0113577	CF 27Ω ±5% SRD1/6P
R102	0113577	CF 27Ω ±5% SRD1/6P
R103	0113663	CF 100KΩ ±5% SRD1/6P
R104	0113635	CF 6.8KΩ ±5% SRD1/6P
R105	0113567	CF 10Ω ±5% SRD1/6P [for E, H, HC]
R151	0113679	CF 470KΩ ±5% SRD1/6P [for E]
R152	0113607	CF 470Ω ±5% SRD1/6P [for E]
R153	0113591	CF 100Ω ±5% SRD1/6P [for E]
R154	0113648	CF 24KΩ ±5% SRD1/6P [for W, W(UN), W(UNS), AU]
R201	0113591	CF 100Ω ±5% SRD1/6P
R202	0113663	CF 100KΩ ±5% SRD1/6P
R203	0113633	CF 5.6KΩ ±5% SRD1/6P
R205	0113663	CF 100KΩ ±5% SRD1/6P
R206	0113648	CF 24KΩ ±5% SRD1/6P
R207LR	0113609	CF 560Ω ±5% SRD1/6P
R208	0113609	CF 560Ω ±5% SRD1/6P
R209	0113579	CF 33Ω ±5% SRD1/6P
R211	0113583	CF 47Ω ±5% SRD1/6P [except H, HC]
R212	0113663	CF 100KΩ ±5% SRD1/6P
R401	0113619	CF 1.5KΩ ±5% SRD1/6P
R402	0113627	CF 3.3KΩ ±5% SRD1/6P
R403LR	0113591	CF 100Ω ±5% SRD1/6P
R404LR	0113675	CF 330KΩ ±5% SRD1/6P
R405LR	0113649	CF 27KΩ ±5% SRD1/6P
R406	0113631	CF 4.7KΩ ±5% SRD1/6P
R407	0113655	CF 47KΩ ±5% SRD1/6P
R408	0113651	CF 33KΩ ±5% SRD1/6P
R409LR	0113651	CF 33KΩ ±5% SRD1/6P
R410LR	0113637	CF 8.2KΩ ±5% SRD1/6P
R411	0113591	CF 100Ω ±5% SRD1/6P
R412	0113647	CF 22KΩ ±5% SRD1/6P
R413	0113647	CF 22KΩ ±5% SRD1/6P
R414	0113623	CF 2.2KΩ ±5% SRD1/6P
R415LR	0113639	CF 10KΩ ±5% SRD1/6P
R416	0113655	CF 47KΩ ±5% SRD1/6P

SYMBOL No.	PART No.	DESCRIPTION
R417	0113563	CF 6.8Ω ±5% SRD1/6P
R418	1119401	MO 10Ω ±10% RS1B
R419	0113653	CF 39KΩ ±5% SRD1/6P
R420	0113647	CF 22KΩ ±5% SRD1/6P
R421LR	0113633	CF 5.6KΩ ±5% SRD1/6P
R422LR	0113639	CF 10KΩ ±5% SRD1/6P
R424LR	0113579	CF 33Ω ±5% SRD1/6P
R425LR	0113613	CF 820Ω ±5% SRD1/6P
R426LR	0113683	CF 680KΩ ±5% SRD1/6P
R427LR	0113635	CF 6.8KΩ ±5% SRD1/6P
R428LR	0113647	CF 22KΩ ±5% SRD1/6P
R429	0113633	CF 5.6KΩ ±5% SRD1/6P [for E, E(BS)]
R430LR	0113627	CF 3.3KΩ ±5% SRD1/6P
R431LR	0113663	CF 100KΩ ±5% SRD1/6P
R432LR	0113631	CF 4.7KΩ ±5% SRD1/6P
R433	0113615	CF 1KΩ ±5% SRD1/6P
R501	1119405	MO 22Ω ±10% RS3B
R502	0113651	CF 33KΩ ±5% SRD1/6P
R503	0113651	CF 33KΩ ±5% SRD1/6P
R504	0113627	CF 3.3KΩ ±5% SRD1/6P
R505	0113651	CF 33KΩ ±5% SRD1/6P
R506	0113665	CF 120KΩ ±5% SRD1/6P
R507	0113607	CF 470Ω ±5% SRD1/6P
R508LR	0113587	CF 68Ω ±5% SRD1/6P
R509LR	0113615	CF 1KΩ ±5% SRD1/6P
R510	0113607	CF 470Ω ±5% SRD1/6P
R511	0113615	CF 1KΩ ±5% SRD1/6P
R518	0113609	CF 560Ω ±5% SRD1/6P
R520	0113651	CF 33KΩ ±5% SRD1/6P
R521	0113651	CF 33KΩ ±5% SRD1/6P
R522	0113651	CF 33KΩ ±5% SRD1/6P
R523	0113651	CF 33KΩ ±5% SRD1/6P
R524	0113639	CF 10KΩ ±5% SRD1/6P
R802LR	0113647	CF 22KΩ ±5% SRD1/6P
R803LR	0113647	CF 22KΩ ±5% SRD1/6P
R804LR	0113641	CF 12KΩ ±5% SRD1/6P
R805LR	0113641	CF 12KΩ ±5% SRD1/6P
R806LR	0113631	CF 4.7KΩ ±5% SRD1/6P
R807LR	0113631	CF 4.7KΩ ±5% SRD1/6P
R809LR	0113679	CF 470KΩ ±5% SRD1/6P
R810LR	0113631	CF 4.7KΩ ±5% SRD1/6P
R811LR	0113639	CF 10KΩ ±5% SRD1/6P

ICs & TRANSISTORS

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
Q801LR	2329453	2SC945PA
Q802LR	2329453	2SC945PA

DIODES

D101	2398082	1N4148
D102	2398082	1N4148
D501	2398082	1N4148
D502	2398082	1N4148
D601	2398061	1N4002
D602	2398061	1N4002
D603	2398061	1N4002 [except H, HC]
D604	2398061	1N4002 [except H, HC]
ZD501	2337517	HZ6C1
LED301	2338831	SLP-155B
LED501	2338831	SLP-155B

VARIABLE RESISTORS

RT201	0150958	10kΩ-(B) (FM MPX ADJ.)
RT501	0150955	1kΩ-(B) (TAPE SPEED ADJ.)
RV801LR	0189288	10kΩ-(A) (VOLUME CONTROL)
RV802LR	0189121	100kΩ-(B) (G.E CONTROL)
RV803LR	0189121	100kΩ-(B) (G.E CONTROL)
RV804LR	0189121	100kΩ-(B) (G.E CONTROL)

COILS & TRANSFORMERS

L101	2137682	FM OSC. coil
L102	2135272	FM RF coil
L151	2137667	ANT. coil [for AU, W, W(UN), W(UNS)]
	2137202	SW ANT. coil [for E]
	2137203	SW ANT. coil [for E(BS)]
L153	2758221	Ferrite antenna [for H, HC]
L152, 153	2757984	Ferrite antenna [for AU, W, W(UN), W(UNS)]
L152, 153	2757992	Ferrite antenna [for E, E(BS)]
L154	2137911	SW OSC. coil [for E, E(BS)]
L154	2137912	SW OSC. coil [for AU, W, W(UN), W(UNS)]
L155	2137903	SW OSC. coil [for AU, W, W(UN), W(UNS)]
L155	2137902	MW OSC. coil [for E, E(BS)]
L156	2137902	MW OSC. coil [for AU, W, W(UN), W(UNS)]
L156	2137901	LW OSC. coil [for E, E(BS)]
L156	2137904	MW OSC. coil [for H, HC]
L157	2137684	Choke coil [except H, HC]
L401LR	2227991	Choke coil
T101	2137891	FM IF transformer
T201	2137892	FM IF transformer
T202	2137905	AM IF transformer
T401	2136892	REC OSC. transformer

MISCELLANEOUS

J401LR	2678781	2P pin jack
J501	2678761	Stereo jack
J601	2678282	DC jack [for W, W(UN), W(UNS)]
PVC	0282431	Capacitor variable [except H, HC]
	0282282	Capacitor variable [for H, HC]
CT151-153	0283557	Capacitor semi variable [for E, E(BS)]
CT153	0283113	Capacitor variable [for AU, W, W(UN), W(UNS)]
CT154	0283113	Capacitor variable [for E, E(BS)]
CT154-156	0283557	Capacitor semi variable [for AU, W, W(UN), W(UNS)]
CT156	0283191	Capacitor trimmer [for E, E(BS)]
CF201	2135321	Ceramic filter
CF202	2155512	Ceramic filter [for E, E(BS)]
	2155511	Ceramic filter [except E, E(BS)]
BPF101	2137191	FM band pass filter
⚠F601	2727741	Fuse T800mA [for E(BS)]
	2727198	Fuse T800mA [for E, AU, W, W(UN), W(UNS)]
S201	2628483	Lever switch (BAND SELECT) [except H, HC]
	2628486	Lever switch (BAND SELECT) [for H, HC]
S202	2628486	Lever switch [AFC(RIF)]
S401	2628332	Slide switch (REC/PLAY SELECT)
S402	2628001	Lever switch (FUNCTION SELECT)
S403	2628486	Lever switch (DUBBING SPEED SELECT/FM MODE SELECT)
S601	2628731	Slide switch [AC/BATT(DC)SELECT]
⚠S602	2618472	Switch (VOLTAGE SELECT) [for W, W(UN), W(UNS)]
M401	2737441	Mic.

CABINET CHASSIS

1	3806791	Tuning knob
2	4577817	BT screw (3 ϕ x 30) (rear case)
3	3806801	Volume knob
4	4044012	Handle
5	4044101	Front case assy [TRK-W330 HC]
	4044102	Front case assy [TRK-W350 H/HC]
	4044041	Front case assy [TRK-W330 E]

SYMBOL No.	PART No.	DESCRIPTION
	4044042	Front case assy [TRK-W350 E/E(BS)]
	4044043	Front case assy [TRK-W350 AU/W/W(UN)]
	4044044	Front case assy [TRK-W350 W(UNS)]
	4044045	Front case assy [TRK-W330 W/AU]
6	3806761	Cassette door (L) (TAPE 1) [TRK-W350]
	3806762	Cassette door (L) (TAPE 1) [TRK-W330]
7	3806771	Cassette door (R) (TAPE 2)
8	3934271	Roller
9	4577661	Roller pin
11	4597203	Tuning shaft
12	4418013	E ring
13	4044141	Pulley holder assy
14	3806921	Holder assy
15	3806961	Pointer
16	3806871	Pulley
17	3340321	Spring
18	3392082	Eject spring [for TRK-W330HC, TRK-W350H/HC]
	3392081	Eject spring [except TRK-W330HC, TRK-W350H/HC]
19	3308121	Snap knob
20	3950381	Damper assy
21	2403972	Speaker 10cm
22	4578972	BT flange screw (3 ϕ x 10) (speaker)
23	8699410	BT bind head screw (3 ϕ x 10) (cassette chassis, holder)
24	8691410	BT bind head screw (3 ϕ x 10) (damper, pulley holder)
25	4044121	Rear case assy [TRK-W330 HC]
	4044122	Rear case assy [TRK-W350 H]
	4044123	Rear case assy [TRK-W350 HC]
	4044061	Rear case assy [TRK-W330 E]
	4044062	Rear case assy [TRK-W350 E]
	4044063	Rear case assy [TRK-W350 E(BS)]
	4044064	Rear case assy [TRK-W350 AU]
	4044065	Rear case assy [TRK-W350 W]
	4044066	Rear case assy [TRK-W350 W(UN)]
	4044067	Rear case assy [TRK-W350 W(UNS)]
	4044068	Rear case assy [TRK-W330 W]
	4044069	Rear case assy [TRK-W330 AU]
26	3806751	Battery cover
27	3392041	Spring
28	2758401	ROD. antenna

SYMBOL No.	PART No.	DESCRIPTION
29	4477502	ANT. terminal
30	4578976	BT flange screw (3 ϕ x 20) (power transformer)
31	8744412	Bind head screw (3 ϕ x 12) (ROD. antenna)
32	2589261	Mechanism (TN-21VW-987) [TRK-W330]
	2589272	Mechanism (TN-521ZVW-122) [TRK-W350]
33	3806782	Cassette button
34	4477492	REC plate
35	8741104	Bind head screw (2 ϕ x 4)
36	8815111	Lock washer
⚠37	2712101	Power supply cord [for E]
⚠	2749582	Power supply cord [for E(BS)]
⚠	2749622	Power supply cord [for AU]
⚠	2706584	Power supply cord [for W, W(UN),W(UNS)]
⚠	2706593	Power supply cord [for H, HC]
⚠38	2249962	Power transformer (52g 4.8VA) [for E]
⚠	2249963	Power transformer (52g 4.8VA) [for E(BS), AU]
⚠	2249961	Power transformer (45g 2.6VA) [for W, W(UN),W(UNS)]
⚠	2249965	Power transformer (52g 4.8VA) [for H, HC]
39	4436666	Terminal

TN-21-VW-987 (for W330)

1	4818992	Switch plate
2	4839371	Push button actuator assy
3	4820212	REC button lever
4	4820213	PLAY button lever
5	4818996	RWD button lever
6	4818997	FF button lever
7	4818998	STOP button lever
8	4818999	PAUSE button lever assy
9	4818990	RWD lever
10	4833451	PAUSE lever
11	4819132	PAUSE lever spring
12	4819133	PAUSE stopper
13	4850692	Button lever spring
14	4856281	Leaf switch
15	4819007	Button lever spring
16	4820217	PLAY button lever spring
17	4819008	Actuator spring
18	4819009	Auto lever
19	4819000	Auto lever spring
20	4820214	Button lever spring
21	4832522	Screw
22	4839372	Pinch roller arm assy
23	4820219	Head panel
24	4820221	Head panel spring
25	4819014	Head base
26	4832412	Sensing plate assy
27	4819060	Screw (2 ϕ x 7)

SYMBOL No.	PART No.	DESCRIPTION
28	4819600	Azimuth screw
29	4819017	Spring
30	4819611	Screw (2 ϕ x 6)
31	4856296	Pinch roller spring
32	4819006	PR stopper
33	4820218	Switch actuator spring
34	4819045	Screw
35	4819044	Eject slide lever spring
36	4820216	MG arm spring
37	4856291	MC arm
38	4820215	Sub chassis
39	4839379	FF gear
40	4839378	Take up roller gear
41	4839381	Take up reel assy
42	4839382	Back tension spring
43	4850698	Washer (1.2 ϕ x 3.7 x 0.4)
44	4839370	Back tension spring
45	4832421	Record safety lever
46	4819036	Pack spring
47	4819063	Tapping screw (2 ϕ x 3)
48	4820225	RF pulley arm spring
49	4835913	RF arm collar screw
50	4820227	Belt
51	4833455	PAUSE bracket
52	4819191	Tapping screw (2 ϕ x 6)
53	4819607	Bind tapping screw (2 ϕ x 5)
54	4833457	Belt
55	4832432	Washer (2.05 ϕ x 4 x 0.5)
56	4819078	Washer (1.55 ϕ x 3.8 x 0.5)
57	4831610	Metal guide
58	4819068	Tapping screw (2 ϕ x 4)
59	4856292	RF pulley arm assy
60	4832415	Take up gear plate assy
61	4833466	Special screw
62	4819533	Motor collar screw
63	4819039	Motor rubber
64	4833465	Special screw
65	4833463	Lever
66	4833464	Lever
67	4833467	Spring
68	4833454	Flywheel assy
69	4820231	Flywheel assy
70	4819020	TG plate spring
71	4833458	Insulation mat
72	4856293	Mat
73	4819043	Eject slide lever
74	2557591	R/P head
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
7	4853655	Auto lever (R)
8	4853656	Auto lever (R) spring
9	4853657	Eject slide lever
10	4853658	Eject slide lever spring
11	4833465	Special screw
12	4853650	Turn over arm
13	4853661	Turn over spring
14	4853662	Button base assy
15	4853663	T gear arm (F) assy
16	4853664	T gear arm (F) spring
17	4853665	T cam gear (F)
18	4853666	T gear arm (R) assy
19	4853667	T gear arm (R) spring
20	4853668	T cam gear (R)
21	4853669	Slide plate
22	4853660	Lock actuator assy
23	4853671	Lock release spring
24	4853672	SW actuator assy
25	4856271	Mode button lever
26	4853674	Button lever spring
27	4856272	PLAY button lever
28	4856273	FF button lever (R)
29	4853677	FF button lever spring
30	4856274	FF button lever (F)
31	4856275	STOP button lever
32	4856276	Program button lever assy
33	4853681	Pull arm spring
34	4856277	STOP button lever spring
35	4853683	Relay plate
36	4853684	FF SW plate
37	4853685	R.C. spring
38	4853686	Auto control arm (F)
39	4853687	Control collar
40	4853688	Auto control arm (R)
41	4853689	Head panel
42	4853680	R.C. plate
43	4853691	R.C. plate spring
44	4853692	H.P. collar
45	4853693	Tape guide
46	4853694	Head spring plate
47	2557631	P head
48	4842401	Slide switch
49	4853696	Switch bracket
50	4853697	Pinch roller spring (F)
51	4853698	Pinch roller spring (R)
52	4853699	Pinch roller (F) assy
53	4853690	Pinch roller (R) assy
54	4853701	Reel plate assy
55	4853702	Reel assy
56	4853703	Leaf switch
57	4819195	Tapping screw (2 ϕ x 5)
58	4853704	FF gear arm (F) assy
59	4853705	FF gear
60	4853706	FF gear arm (R) assy
61	4853707	FF gear arm collar
62	4853708	FF gear arm spring (F)
63	4853709	Flywheel assy
64	4853700	Main belt
65	4853712	P kick lever
66	4833463	Lever
67	4833466	Special screw

SYMBOL No.	PART No.	DESCRIPTION
68	4842404	Motor rubber
69	4819533	Motor collar screw
70	4856278	Mat
71	4853715	P kick lever spring
73	4853716	Lock actuator spring
74	4853717	SW actuator spring
75	4853719	C tapping screw (2 ϕ x 3)
76	4819191	Tapping screw (2 ϕ x 6)
77	4842443	Washer (2.1 ϕ x 5 x 0.5)
78	4853710	Tams screw (2 ϕ x 6)
79	4853721	Camera S tapping screw (1.7 ϕ x 4)
80	4853722	Screw (2 ϕ x 4.5)
81	4842414	Washer (2 ϕ x 3.5 x 0.3)
82	4842430	Washer (2.1 ϕ x 3 x 0.3)
83	4853723	Washer (1.45 ϕ x 4 x 0.5)
84	4819068	Tapping screw (2 ϕ x 4)
85	4842412	Camera S tapping screw (1.7 ϕ x 2.5)
86	4842444	Washer (1.2 ϕ x 3 x 0.25)
87	4853724	Camera S tapping screw (1.7 ϕ x 3)
88	4819077	Washer (1.2 ϕ x 3 x 0.4)
89	4853725	Washer (3 ϕ x 8.5 x 0.13)
90	4853726	Camera S tapping screw (1.7 ϕ x 8)
91	4818992	Switch plate
92	4839371	Push button actuator assy
93	4820212	REC button lever
94	4856270	PLAY button lever
95	4818996	RWD button lever
96	4818997	FF button lever
97	4818998	STOP button lever
98	4818999	PAUSE button lever assy
99	4818990	RWD lever
100	4833451	PAUSE lever
101	4819132	PAUSE lever spring
102	4819133	PAUSE stopper
103	4819100	Button lever spring
104	4819007	Button lever spring
105	4820217	PLAY button lever spring
106	4819008	Actuator spring
107	4819009	Auto lever
108	4819000	Auto lever spring
109	4820214	Button lever spring
110	4856281	Leaf switch
111	4820219	Head panel
112	4842423	Sensing plate assy
113	4832522	Screw
114	4820221	Head panel spring
115	4819014	Head base
116	4819006	PR stopper
117	4819045	Screw
118	4819017	Spring
119	4839372	Pinch roller arm assy
120	4842424	Pinch roller spring
121	4831610	Metal guide
122	4856282	RF pulley arm assy
123	4820225	RF pulley arm spring
124	4820226	RF arm collar screw
125	4820227	Belt

SYMBOL No.	PART No.	DESCRIPTION
126	4856283	Main belt
127	4850092	Flywheel
128	4842428	Reel base assy
129	4842429	T gear plate assy
130	4839378	Take up roller gear
131	4819020	TG plate spring
132	4839379	FF gear
133	4842420	Back tension spring
134	4842431	Supply reel assy
135	4853729	Take up reel assy
136	4832421	Record safety lever
137	4839382	Back tension spring
138	4819043	Eject slide lever
139	4819044	Eject slide lever spring
140	4842433	Bracket
141	2557591	R/P head
142	2557551	Erase head
143	4819018	MG arm
144	4820218	Switch actuator spring
145	4856279	Motor assy
	4856284	Motor assy (Note 1)(Remarque1)
146	4853659	Sub chassis assy
147	4842434	Camera tapping screw (2 ϕ x 3.5)
148	4819078	Washer (1.55 ϕ x 3.8 x 0.5)
149	4820215	Sub chassis
150	4819607	Bind tapping screw (2 ϕ x 5)
151	4819611	Screw (2 ϕ x 6)
152	4819060	Screw (2 ϕ x 7)
153	4819600	Azimuth screw
154	4832431	Tapping bind screw (2 ϕ x 4)
155	4853731	Washer (1.2 ϕ x 3.7 x 0.4)
156	4853732	Button lever spring (P)
157	4853733	RC arm
158	4858251	Motor bracket
	4853711	Motor bracket (Note 2)(Note 3) (Remarque 2) (Remarque 3)

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 t 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

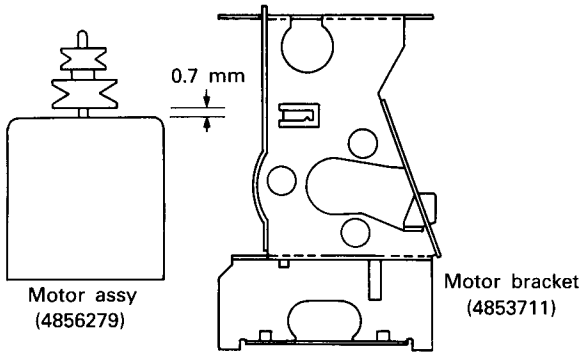
Note 2

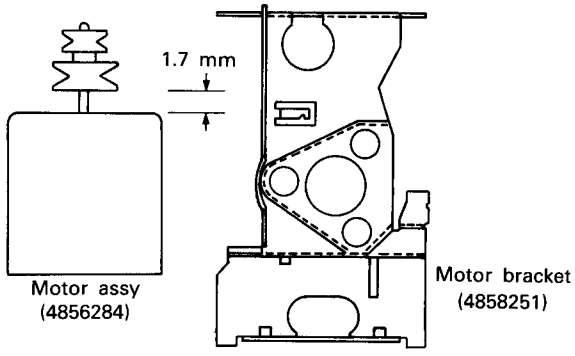
There are two types of motor bracket shapes to go with the change in the motor assembly part number, so be careful not to confuse then when ordering.

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

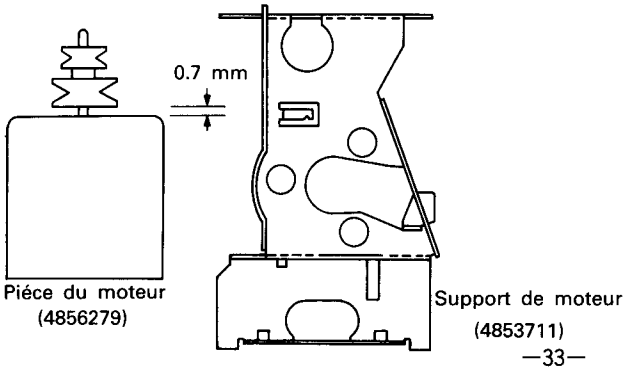
Remarque 2

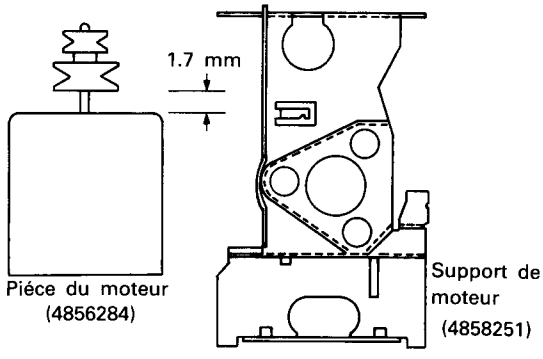
Il existe deux formes de support de moteur pour correspondre au changement du numéro de pièce du moteur. Faites attention de ne pas les confondre lorsque vous passez votre commande.

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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TRK-W330/W350 TY No. 577 EF

Printed in Japan (Ho)