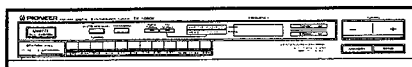


Service Manual



FM/AM DIGITAL SYNTHESIZER TUNER

TX-1080Z

MODEL TX-1080Z COMES IN TWO VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Power requirement	Destination
Z/UC	(DC power supply)	U.S.A. and Canada
Z	(DC power supply)	General market

- This service manual is applicable to the Z/UC and Z types.
- As to the Z type, please refer to page 28.
- Ce manuel d'instruction se réfère au mode de réglage en français. (p. 24 - p. 25).
- Este manual de servicio trata del método ajuste escrito en español. (p. 26 - p. 27).

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1. SPECIFICATIONS

FM Tuner Section

Frequency range	87.5 MHz to 108 MHz
Usable Sensitivity (IHF)	12.7dBf (1.2 μ V/75 Ω)
50dB Quieting Sensitivity	MONO: 18dBf (2.2 μ V/75 Ω) STEREO: 38.3dBf (22.6 μ V/75 Ω)
Signal-to-Noise Ratio	Mono; 77 dB (at 85 dBf) Stereo; 73 dB (at 85 dBf)
Distortion	0.5% (1 kHz)
Alternate Channel Selectivity	60 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz (\pm 1 dB)
Image Response Ratio	38 dB
IF Response Ratio	110 dB
Antenna Input	300 Ω balanced 75 Ω unbalanced
Output	650mV (100% MOD.)

AM Tuner Section

Frequency range (10kHz/9kHz step)	530/531 kHz to 1,700/1,602 kHz
Sensitivity (IHF, Loop antenna)	350 μ V/m
Selectivity	20 dB
Signal-to-Noise Ratio	45 dB
IF Response Ratio	50 dB
Antenna	Loop Antenna
Output	150 mV (30% MOD.)

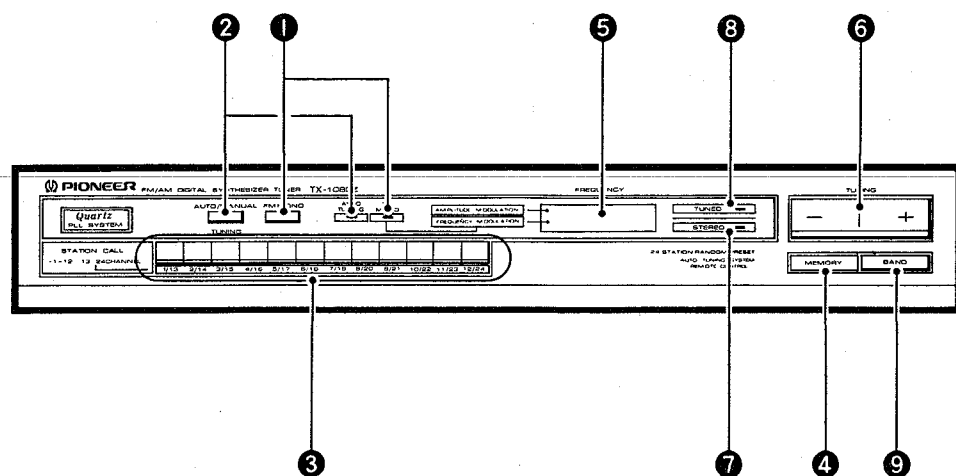
Miscellaneous

Dimensions	420 (W) x 60 (H) x 215 (D) mm 16-1/2 (W) x 2-3/8 (H) x 8-7/16 (D) in
Weight (without package)	2 kg (4 lb 6 oz)

Furnished Parts

FM T-type Antenna	1
AM Loop Antenna	1

2. PANEL FACILITIES



1 FM MONO switch/indicator

Normally this is set to the off position (the FM MONO indicator goes off). When noise spoils the reception of an FM program, press the switch to the on position (the FM MONO indicator will now light).

The program of an FM stereo broadcast will be heard in mono. The setting of the FM MONO switch (on or off) is memorized along with the station's frequency in the STATION CALL switches.

When using the preset tuning feature, reception will be in the mode selected when the station was memorized.

This switch will not function for AM reception.

2 AUTO/MANUAL tuning switch/indicator

Use to select either the AUTO mode or MANUAL mode for FM/AM reception. (When the auto tuning mode is selected, the AUTO TUNING indicator will now light).

3 STATION CALL switches

These are used to recall preset broadcasting stations and to preset the station.

4 MEMORY switch

This switch is used to memorize stations. When the switch is pressed, the frequency indicator will flash. To memorize the frequency of any station, press the STATION CALL switch while the frequency display is flashing.

5 FREQUENCY display

Permits reading the received frequency at a glance from the displayed figure. The FM band is indicated by MHz, and the AM band by kHz.

6 TUNING switch

This is used to locate the stations. Push either side "-" to go to a lower, and the right side "+" to go to a higher frequency.

7 STEREO indicator

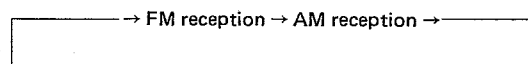
This lights when a stereo program has been picked up during an FM broadcast.

8 TUNED indicator

This lights to indicate when the finest tuning of a station has been achieved.

9 BAND SELECTOR switch

This is used to select the band of the desired station. The bands change alternately each time the switch is pressed.



Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another (signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas). Proper antenna installation is vital to good reception.

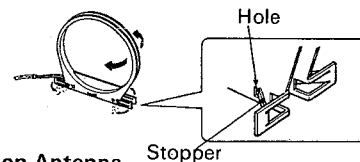
AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

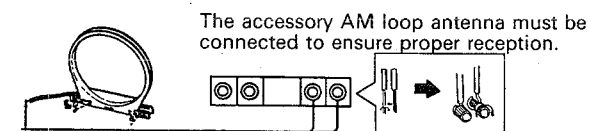
Setting Up the AM Antenna

- Fold out the supports on the bottom of the antenna. Insert the stopper in the hole in the antenna to lock them in place.
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

AM Loop Antenna Set-up



AM Loop Antenna Connection



External AM antenna

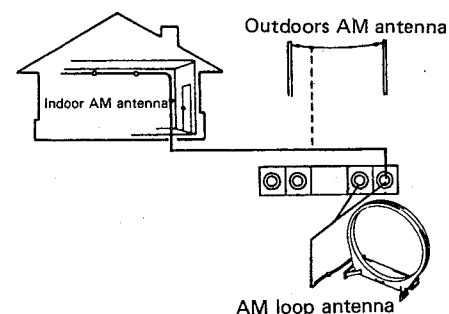
Indoor AM antenna

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

Outdoor AM antenna

If reception is still poor even when a lead antenna has been stretched out indoors, stretch out a vinyl-coated wire and secure it outdoors.

Connecting the external AM antenna



NOTE:
Do not detach the AM loop antenna when using the external AM antenna.

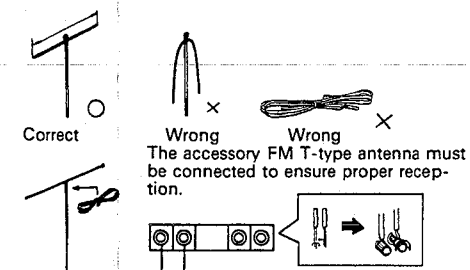
3. PAC

FM ANTENNA

FM T-type Antenna Attachment

Connect the accessory FM T-type antenna to the FM terminals. Stretch the antenna out to its full length, and affix it to a wall, etc.

Stretch out both ends.

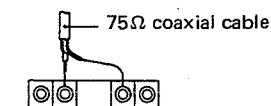


External FM antenna installation

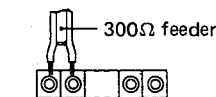
Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory T-type FM antenna, or when the sound heard is accompanied by large amounts of noise. There are two ways of connecting the external FM antenna to the ANTENNA terminals: with 300Ω feeder wire, or with a 75Ω coaxial cable.

It is recommended that you use the 75Ω coaxial cable, so that the effects of extraneous noise are reduced to a minimum.

When the connecting cable is a 75Ω coaxial cable



When the connecting cable is a 300Ω feeder wire



AM/FM CHANNEL STEP SWITCH

The AM/FM channel step switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel allotment plan of the area in which the tuner is sold. When the TUNING switch is given a single push, the frequency display will change in the following units.

Model destination	CHANNEL STEP switch position	Frequency change	
		FM mode	AM mode
North America and Continental South America	100 kHz/10 kHz	100 kHz	10 kHz
Other countries	50 kHz/9 kHz	50 kHz	9 kHz

NOTE:

- If the switch is set to the wrong position, correct tuning will not be possible.

Consult your dealer if you are not sure about the channel allotment plan in your area.

• Parts Li

Mark	No.
	1.
	2.
	3.
	4.

51.

Radio reception is not possible unless the antenna is properly connected.

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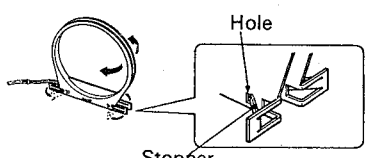
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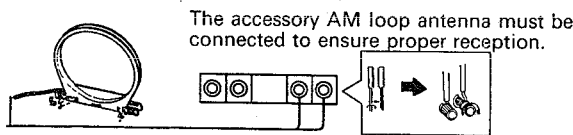
Setting Up the AM Antenna

- Fold out the supports on the bottom of the antenna. Insert the stopper in the hole in the antenna to lock them in place.
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

AM Loop Antenna Set-up



AM Loop Antenna Connection



External AM antenna

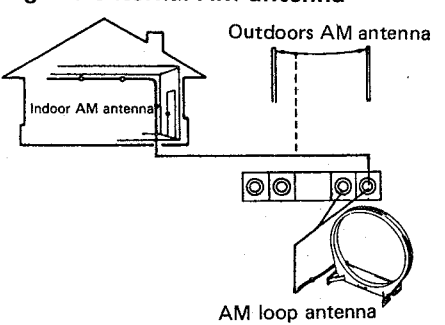
Indoor AM antenna

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

Outdoor AM antenna

If reception is still poor even when a lead antenna has been stretched out indoors, stretch out a vinyl-coated wire and secure it outdoors.

Connecting the external AM antenna



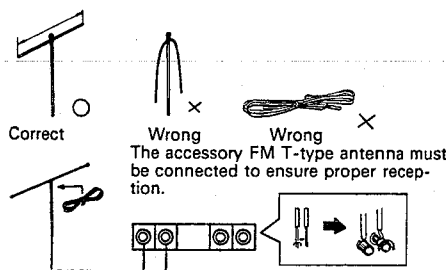
NOTE:
Do not detach the AM loop antenna when using the external AM antenna.

FM ANTENNA

FM T-type Antenna Attachment

Connect the accessory FM T-type antenna to the FM terminals. Stretch the antenna out to its full length, and affix it to a wall, etc.

Stretch out both ends.

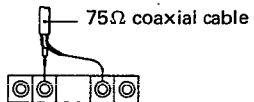


External FM antenna installation

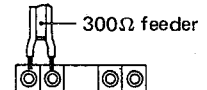
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When the connecting cable is a 300Ω feeder wire



AM/FM CHANNEL STEP SWITCH

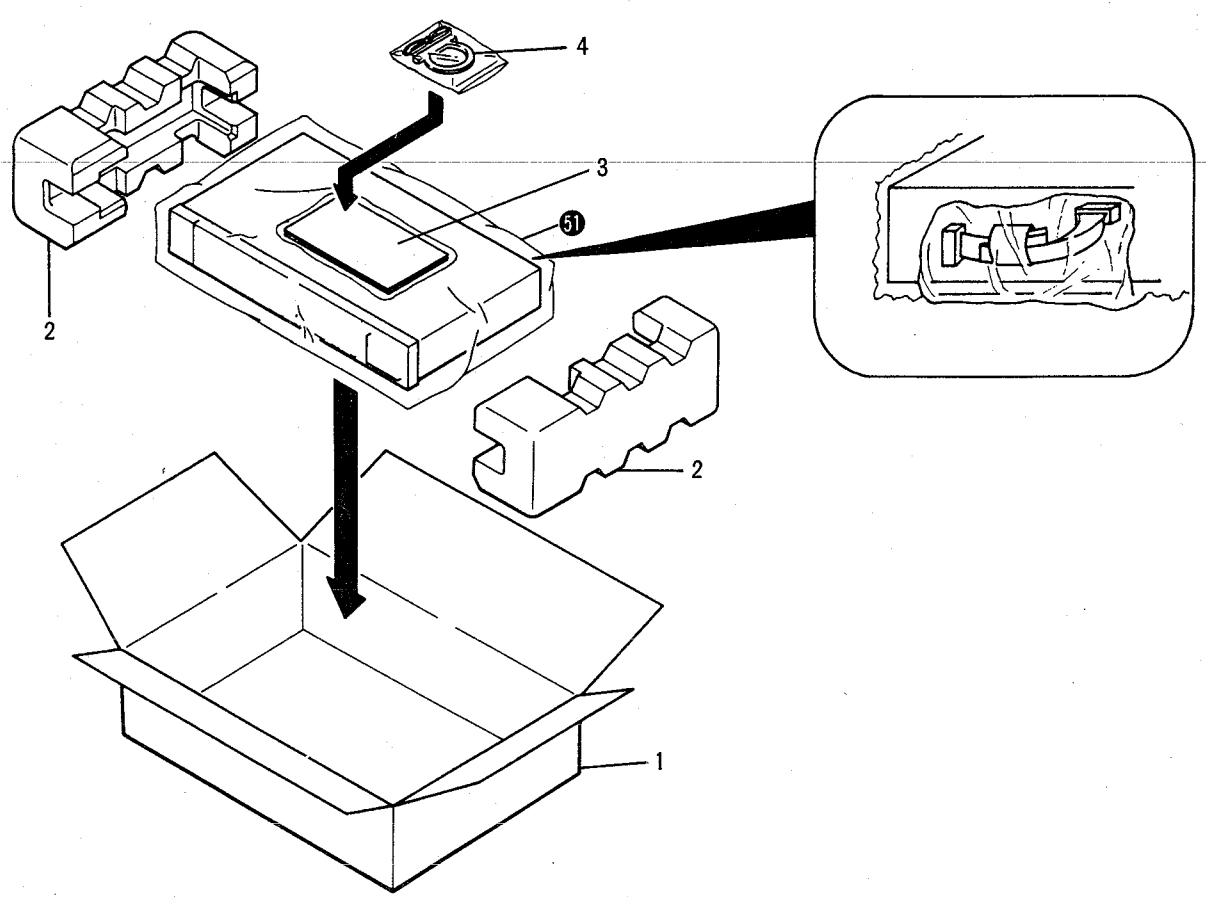
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Model destination	CHANNEL STEP switch position	Frequency change	
		FM mode	AM mode
North America and Continental South America	100 kHz/10 kHz	100 kHz	10 kHz
Other countries	50 kHz/9 kHz	50 kHz	9 kHz

NOTE:
• If the switch is set to the wrong position, correct tuning will not be possible.

Consult your dealer if you are not sure about the channel allotment plan in your area.

3. PACKING



• Parts List of Packing

Mark	No.	Part No.	Description
	1.	AHD1215	Packing case
	2.	AHA1046	Side pad
	3.	ARH-051	Supplementary instructions
	4.	AEA1002	Antenna set
	51.		Packing sheet

Note: In some cases, the TX-1080Z/Z/UC type is sold together with the Model SA-1480/KUC type and SA-1280/KUC type as a combination system. Consequently, the operating instructions include these models and are packed with the Model SA-1480/KUC type and SA-1280/KUC type.

• Parts List of Operating Instructions (TX-1080Z/Z/UC type)

Part No.	Model
ARB1066	Stereo Amplifier SA-1480/KUC type (English)
ARB1065	Stereo Amplifier SA-1280/KUC type (English)

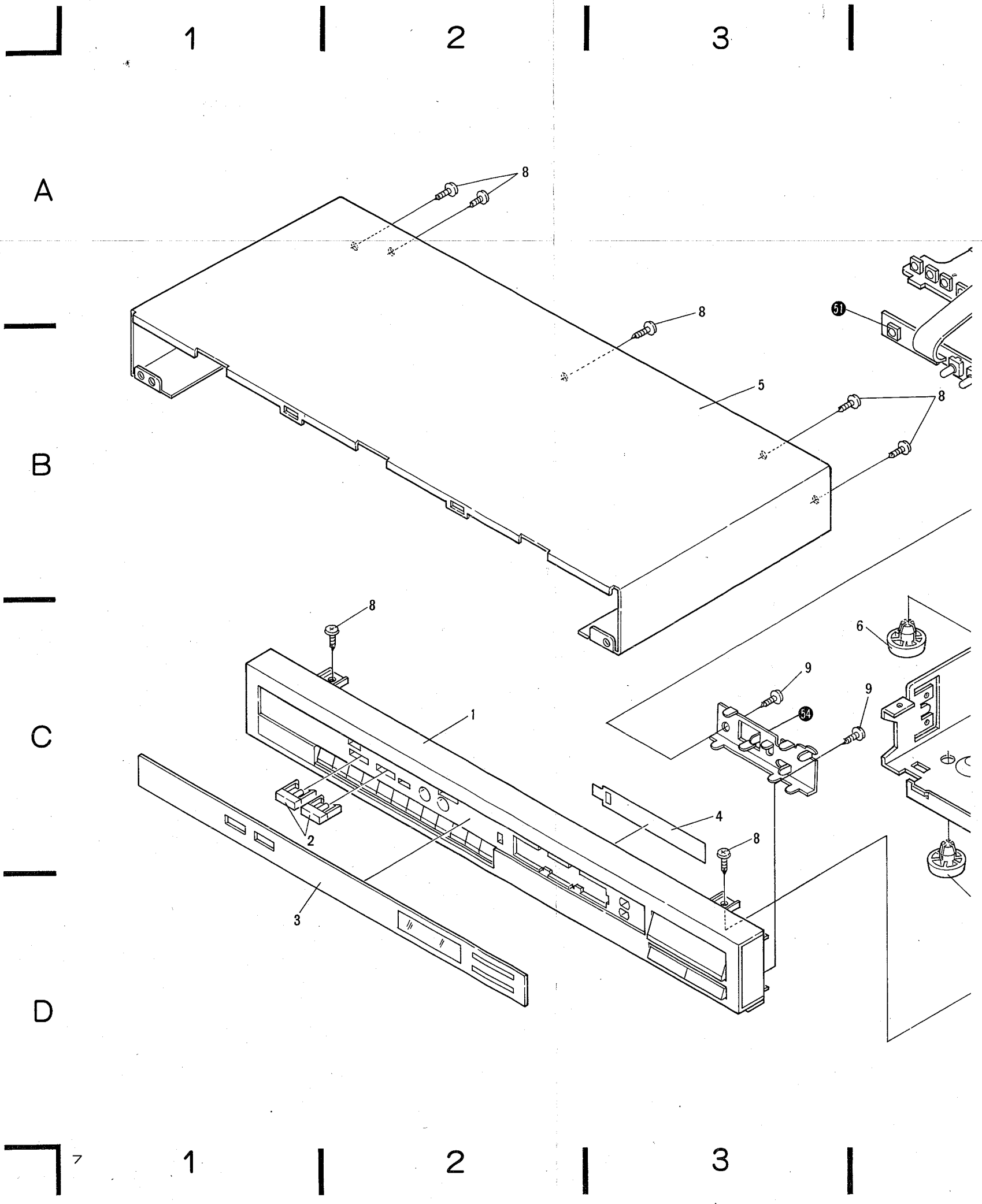
4. EXPLODED VIEWS AND PARTS LIST

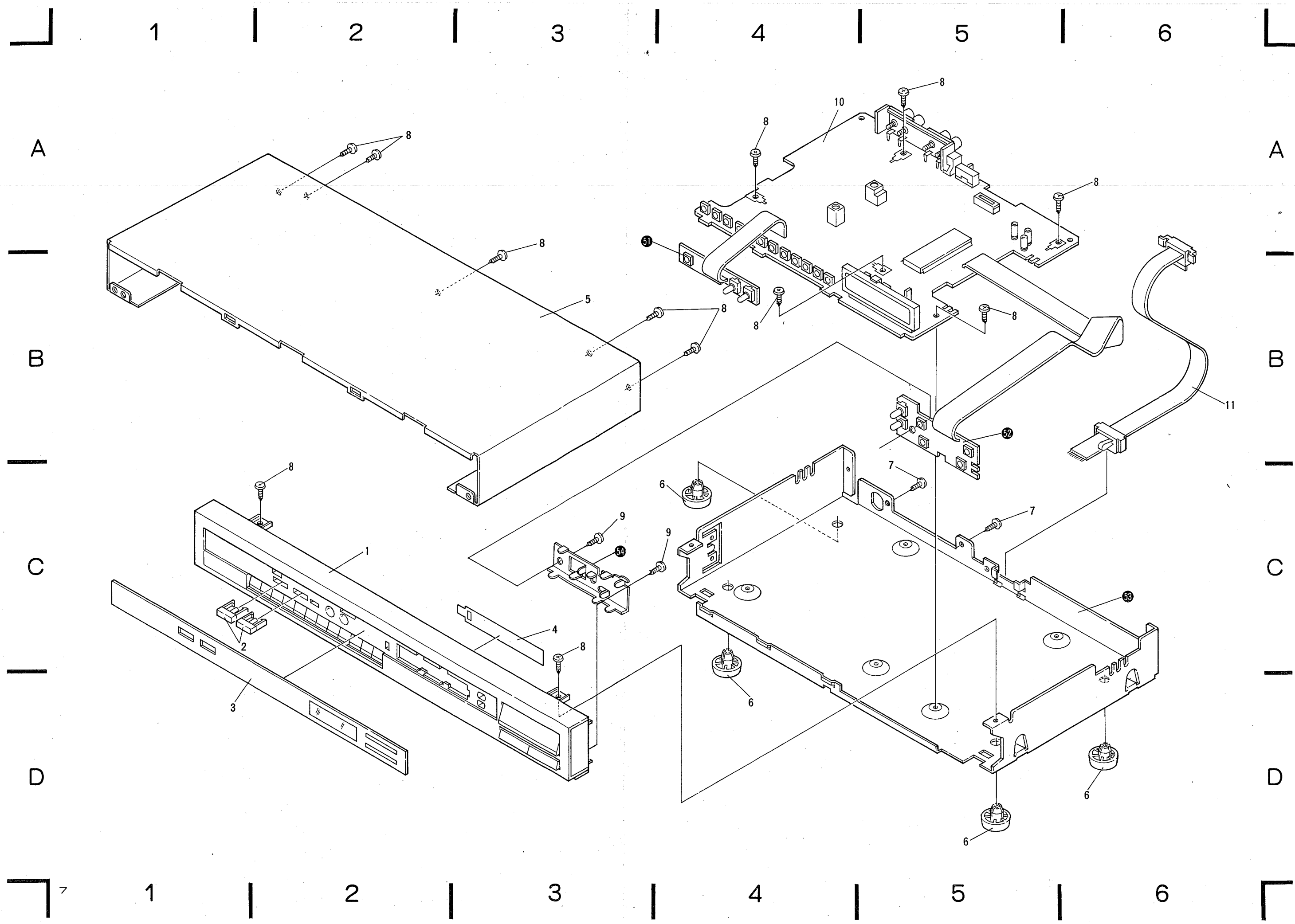
NOTES:

- Parts without part number cannot be supplied.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.
★★ GENERALLY MOVES FASTER THAN ★
 This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

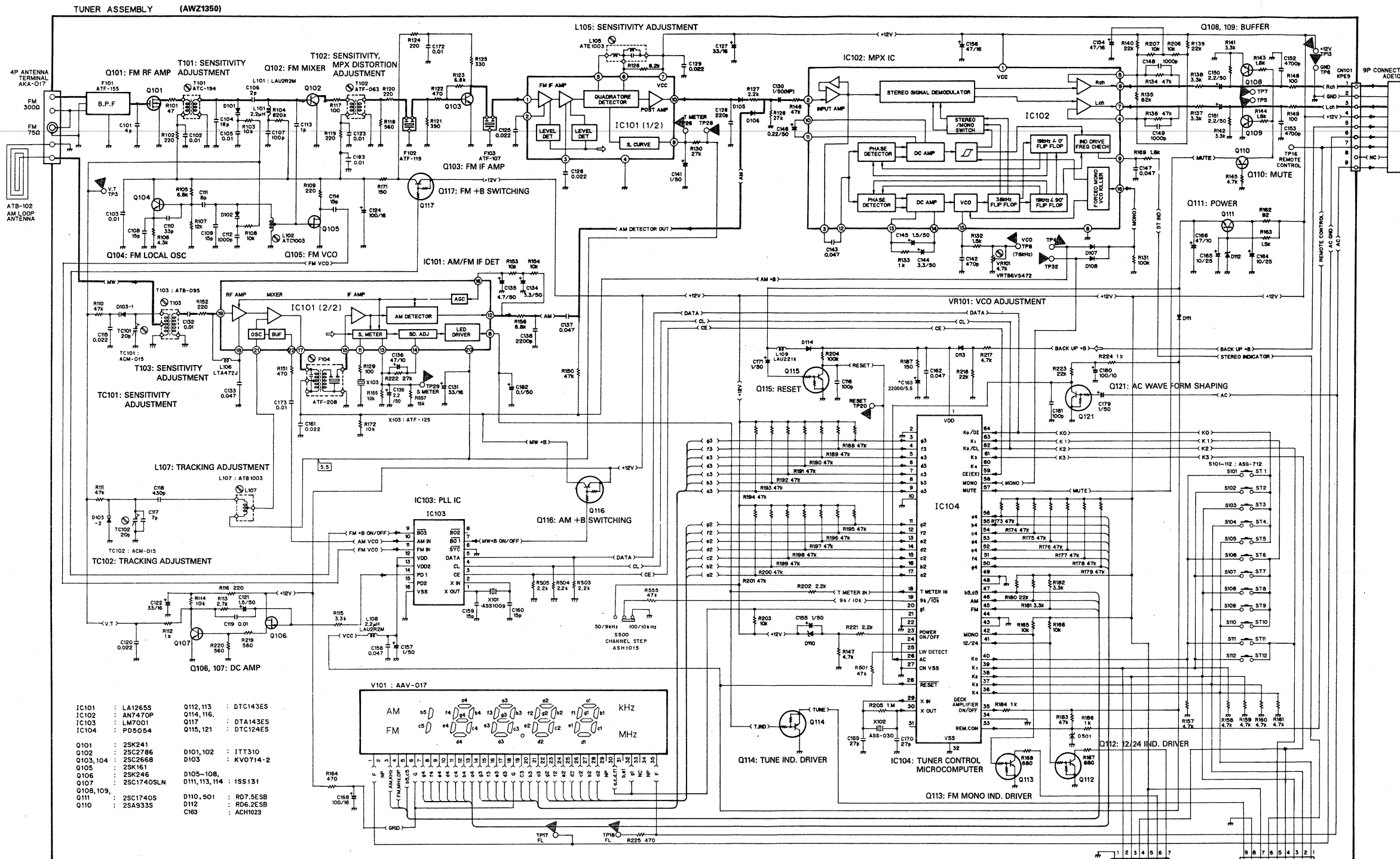
Parts List

Mark	No.	Part No.	Description
	1.	AMB1166	Front panel assembly
	2.	AAD1107	Push knob B
	3.	AAK1226	Indicator panel
	4.	AAK1257	FL filter
	5.	ANE1070	Bonnet case
	6.	AEC1049	Leg assembly
	7.	ABA-298	Screw
	8.	ABA1009	Screw
	9.	BPZ30P080FZK	Screw
	10.	AWZ1350	Tuner assembly
	11.	ADE1024	Connection cable
	51.		SW1 assembly
	52.		SW2 assembly
	53.		Chassis
	54.		PCB setting plate





5. SCHEMATIC DIAGRAM



IC101 : LA12655	Q112, 113 : DTC143ES
IC102 : AN7470P	Q114, 116, : DTA143ES
IC103 : LM7001	Q117 : DTC124ES
IC104 : PD5054	Q115, 121 : DTC124ES
Q101 : 2SK241	D101, 102 : 1TT310
Q102 : 2SC2786	D103 : KW0714-2
Q103, 104 : 2SC2668	D105-108, : 1SS131
Q105 : 2SK161	D111, 113, 114 : 1SS131
Q106 : 2SK246	D110, 501 : RD7.5E5B
Q107 : 2SC1740SLN	D112 : RD6.2E5B
Q108, 109, : 2SC1740S	C183 : ACH1023
Q110 : 2SA933S	

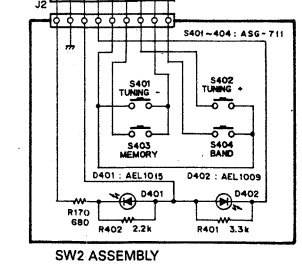
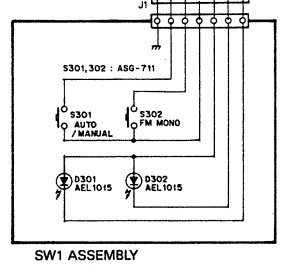
- RESISTORS:** Indicated in Ω, 1/8W, 1/4W, ±5% tolerance unless otherwise noted. k: kΩ, M: MΩ, (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% tolerance.
- CAPACITORS:** Indicated in capacity (μF)/voltage (V) unless otherwise noted. p: pF. Indication without voltage is 50V except electrolytic capacitor.
- VOLTAGE, CURRENT:** □: DC voltage (V) at no input signal. Value in () is DC voltage at rated power. mA: DC current at no input signal. mV: Signal voltage at FM 400 Hz ±75 Hz DEV.

- OTHERS:**
 - : Signal route.
 - ⊙: Adjusting point.

The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation. Marked capacitors and resistors have parts numbers. This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

- SWITCHES:**
 - S101 : 1/13
 - S102 : 2/14
 - S103 : 3/15
 - S104 : 4/16
 - S105 : 5/17
 - S106 : 6/18
 - S107 : 7/19
 - S108 : 8/20
 - S109 : 9/21
 - S110 : 10/22
 - S111 : 11/23
 - S112 : 12/24

- S301 : AUTO / MANUAL
 - S302 : FM MONO
 - S401 : TUNING -
 - S402 : TUNING +
 - S403 : MEMORY
 - S404 : BAND SELECTOR
 - S500 : CHANNEL STEP FM/AM 50/9 kHz - 100/10 kHz
- The underlined indicates the switch position.



6. P.C. BOARDS CONNECTION DIAGRAM

TUNER ASSEMBLY(AWZ1350)

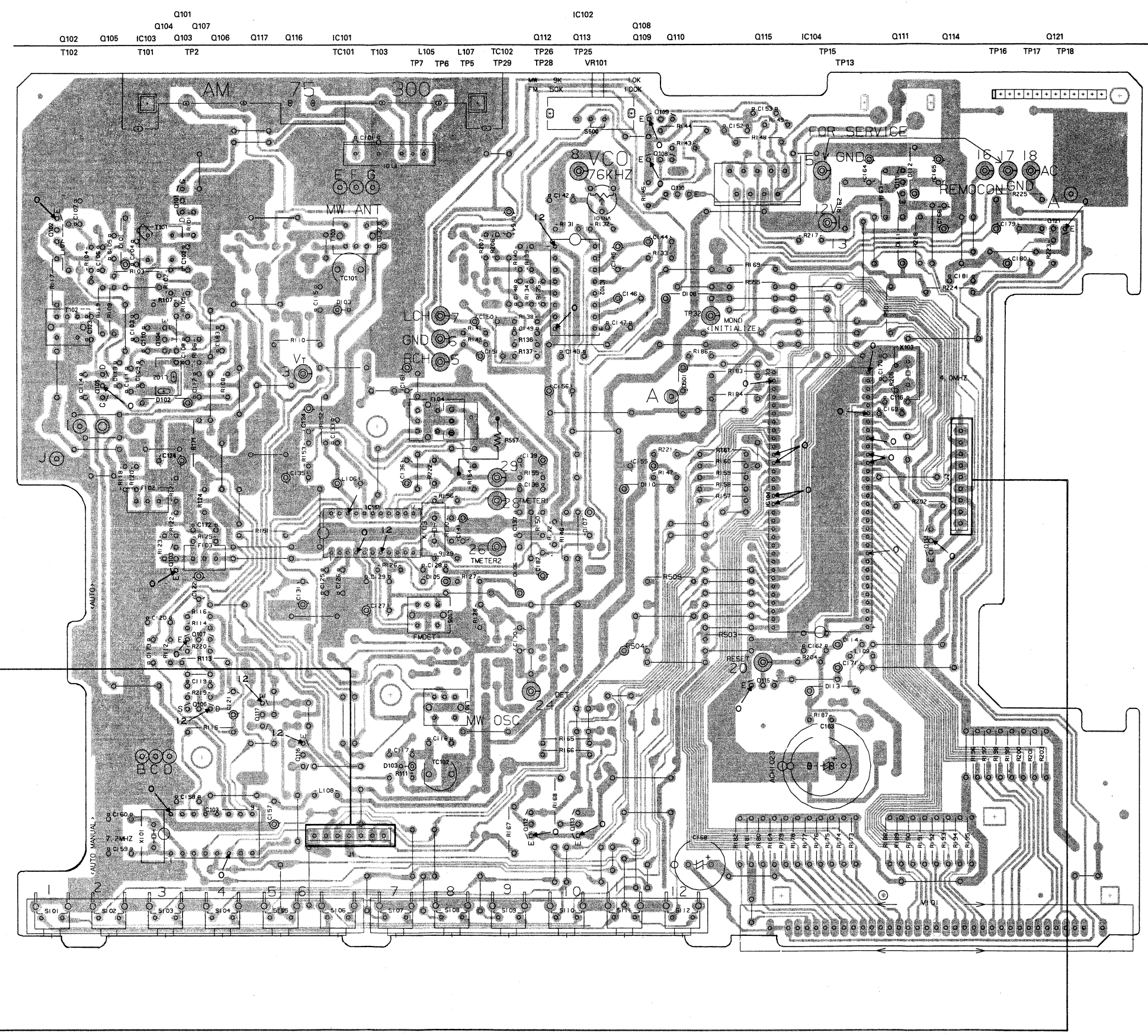
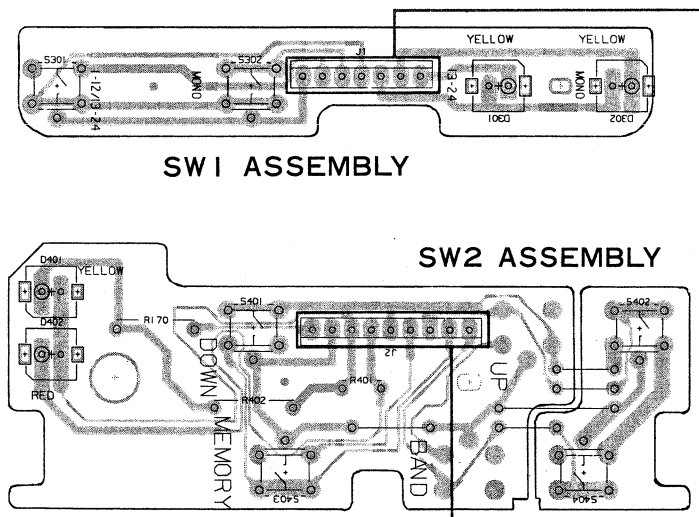
- NOTE**
1. This P.C.B connection diagram is viewed from the parts mounted side.
 2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

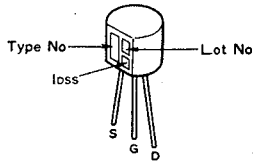
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⊙ (double circles) shows negative terminal.
4. The diode terminal marked with ⊙ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

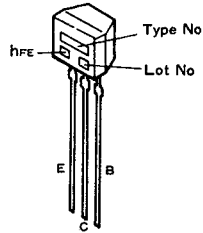


External Appearances of Transistors and ICs

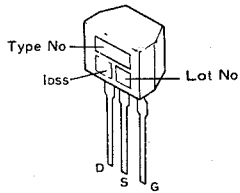
2SK246



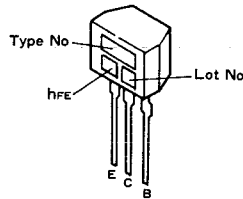
2SC2786



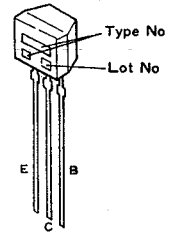
2SK161
2SK241



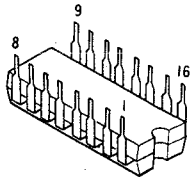
2SA933S
2SC1740S
2SC1740SLN
2SC2668



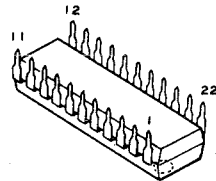
DTA143ES
DTC124ES
DTC143ES



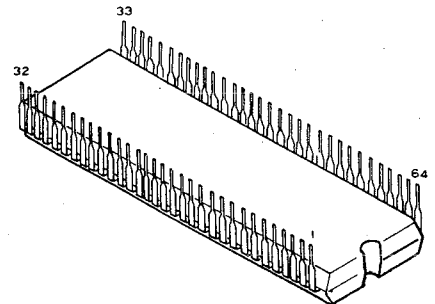
AN7470P
LM7001



LA1265S



PD5054



7. ELECTRICAL PARTS LIST

NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.
★★ GENERALLY MOVES FASTER THAN ★
This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω	56 $\times 10^1$	561.....	RD1/4PS	5	6	1	J
47k Ω	47 $\times 10^3$	473.....	RD1/4PS	4	7	3	J
0.5 Ω	0R5.....		RN2H	0	5		K
1 Ω	010.....		RSIP	0	1	0	K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	562 $\times 10^1$	5621.....	RN1/4SR	5	6	2	1	F
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MISCELLANEOUS PARTS

Mark	Symbol & Description	Part No.
	Tuner assembly	AWZ1350
	SW1 assembly	
	SW2 assembly	

SWITCHES

Mark	Symbol & Description	Part No.
★★	S101 – S112 Tact switch (STATION)	ASG-712
★★	S500 Slide switch (CHANNEL ATEP)	ASH1015

Tuner Assembly (AWZ1350)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC102	AN7470P
★★	IC101	LA1265S
★★	IC103	LM7001
★★	IC104	PD5054
★★	Q114, Q116, Q117	DTA143ES
★★	Q115, Q121	DTC124ES
★★	Q112, Q113	DTC143ES
★★	Q110	2SA933S
★★	Q108, Q109, Q111	2SC1740S
★★	Q107	2SC1740SLN
★★	Q103, Q104	2SC2668
★★	Q102	2SC2786
★★	Q105	2SK161
★★	Q101	2SK241
★★	Q106	2SK246
★	D101, D102	ITT310
★	D103	KV0714-2
★	D112	RD6.2ESB
★	D110, D501	RD7.5ESB
★	D105 – D108, D111, D113, D114	1SS131

COILS, TRANSFORMERS AND FILTERS

Mark	Symbol & Description	Part No.
	L107 AM OSC coil	ATB1003
	L102 FM coil	ATC1003
	L105 FM DET coil	ATE1003
	L101, L108 Axial inductor	LAU2R2M
	L109 Axial inductor	LAU221K
	L106 Inductor	LTA472J
	T103 AM ANT transformer	ATB-095
	T101 FM RF transformer	ATC-194
	T102 FM matching transformer	ATE-063
	F103 FM ceramic filter	ATF-107
	F102 FM ceramic filter	ATF-119
	F101 FM band pass filter	ATF-155
	F104 AM ceramic filter	ATF-208

CAPACITORS

Mark	Symbol & Description	Part No.
	C163 (22000 μ F/5.5V)	ACH1023
	TC101, TC102 Ceramic trimmer	ACM-015
	C116, C181	CCCSL101J50
	C113	CCDCH010C50
	C106	CCDCH020C50
	C101	CCDCH040C50
	C111	CCDCH080D50
	C108, C114, C159, C160	CCDCH150J50
	C169, C170	CCDCH270J50
	C110	CCDCH330J50

Mark	Symbol & Description	Part No.
	C104	CCDRH180J50
	C107	CCDSL101J50
	C128	CCDSL221J50
	C109	CCDTH150J50
	C117	CCDUJ070D50
	C130	CEANP010M50
	C146	CEASR22M50
	C182	CEAS0R1M50
	C141, C155, C157, C171, C179	CEAS010M50
	C121, C145	CEAS1R5M50
	C164, C165	CEAS100M25
	C180	CEAS101M10
	C124, C168	CEAS101M16
	C139, C150, C151	CEAS2R2M50
	C134, C144	CEAS3R3M50
	C122, C127, C131	CEAS330M16
	C135	CEAS4R7M50
	C136, C166	CEAS470M10
	C154, C156	CEAS470M16
	C148, C149	CKCYB102K50
	C138	CKCYB222K50
	C152, C153	CKCYB472K50
	C119, C132	CKCYF103Z50
	C120	CKCYF223Z50
	C133, C143, C147	CKCYF473Z50
	C137	CKCYX473M25
	C112	CKDYB102K50
	C102, C103, C105, C123, C172, C173, C183	CKDYF103Z50
	C115, C125, C126, C129, C161	CKDYF223Z50
	C158, C162	CKDYF473Z50
	C118	CQSA431J50
	C142	CQSA471J50

RESISTORS

Mark	Symbol & Description	Part No.
★	VR101 Semi-fixed (4.7kΩ)	VRTB6VS472
	R162, R167, R168, R171, R225	RD1/4PM□□□J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Antenna terminal (4P)	AKA-017
★	V101 Fluorescent tube	AAV-017
★	X102 Ceramic resonator	ASS-030
★	X101 Crystal resonator	ASS1009
★	X103 Ceramic resonator	ATF-125

SW1 Assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★	D301, D302 LED assembly	AEL1015

SWITCHES

Mark	Symbol & Description	Part No.
★★	S301, S302 Tact switch (AUTO/MANUAL, FM MONO)	ASG-711

SW2 Assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★	D402 LED assembly	AEL1009
★	D401 LED assembly	AEL1015

SWITCHES

Mark	Symbol & Description	Part No.
★★	S401 – S404 Tact switch (TUNING –, TUNING +, MEMORY, BAND)	ASG-711

RESISTORS

Mark	Symbol & Description	Part No.
	R170	RD1/4PM681J
	R402	RD1/8PM222J
	R401	RD1/8PM332J

8. ADJUSTMENTS

PREPARATION

- Make sure that the CHANNEL STEP switch (S500) is at the 100/10kHz position. (Set the TX-1080Z/Z Type to 100/10kHz or 50/9kHz, as applicable.)
- Connect TP15 (GND) with TP17 (GND).
- Supply DC 12V between TP18 and TP17, and between TP13 and TP15 (see Fig. 8-3).

FM Tuner Adjustment

- Make the wire connections as shown in Fig. 8-1.
- Set the function to FM.
- The adjustment place and the test point are in the tuner assembly (AWZ1350).

Step No.	FM SG (1kHz \pm 75kHz dev.)		TX-1080Z Reception Frequency Display	Adjustment	
	Frequency (MHz)	Level (dB μ)		Adjustment Location	Specifications
1	98.0	60	98.0MHz	L105	Adjust so that DC voltage is 0V \pm 0.1V for TP28 (T METER 1) and TP26 (T METER 2).
2	98.0	60	98.0MHz	T101, T102	Adjust the output terminal (TP5: L ch, TP7: Rch) voltage to the maximum.
3	—	—	98.0MHz	VR101	Grounding the D106 cathode through a 220 μ F capacitor sets the TP8 frequency to 76kHz \pm 200Hz.
4	98.0 *1 (stereo modulation)	60	98.0MHz	T102	Adjust the output terminal (TP5: Lch, TP7: Rch) distortion to the minimum.

(*1) Stereo Modulation: Main 1kHz L + R \pm 68.25Hz dev.
Pilot 19kHz \pm 6.75kHz dev.

AM Tuner Adjustment

- Make the connections as shown in Fig. 8-2.
- Set the function to AM.
- The adjustment place and the test point are in the tuner assembly (AWZ1350).

Step No.	AM SG (400Hz, 30% modulation)		TX-1080Z Reception Frequency Display	Adjustment	
	Frequency (kHz)	Level (dB μ)		Adjustment Location	Specifications
1	—	—	*2 530kHz	L107	Adjust TP3 (VT) to 1.3V \pm 0.1V.
2	—	—	*3 1700kHz	TC102	Adjust TP3 (VT) to 10V \pm 0.5V.
3	*4 603	Level at which output is not saturated.	*4 603kHz	T103	Adjust the output terminal (TP5: L ch, TP7: R ch) voltage to the maximum.
4	*5 1395		*5 1395kHz	TC101	

(*2) 531kHz when S500 of the TX-1080Z/Z Type is set to 50/9kHz.
 (*3) 1602kHz when S500 of the TX-1080Z/Z Type is set to 50/9kHz.
 (*4) 600kHz when S500 of the TX-1080Z/Z Type is set to 50/9kHz.
 (*5) 1400kHz when S500 of the TX-1080Z/Z Type is set to 50/9kHz.

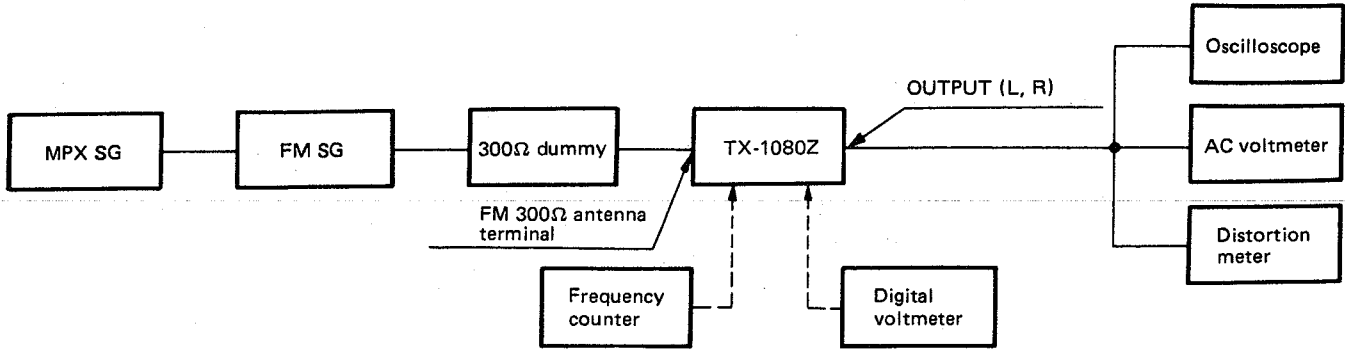


Fig. 8-1 FM Tuner Connection

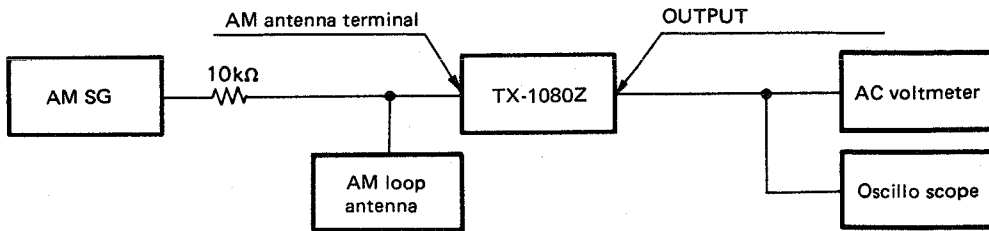


Fig. 8-2 AM Tuner Connection

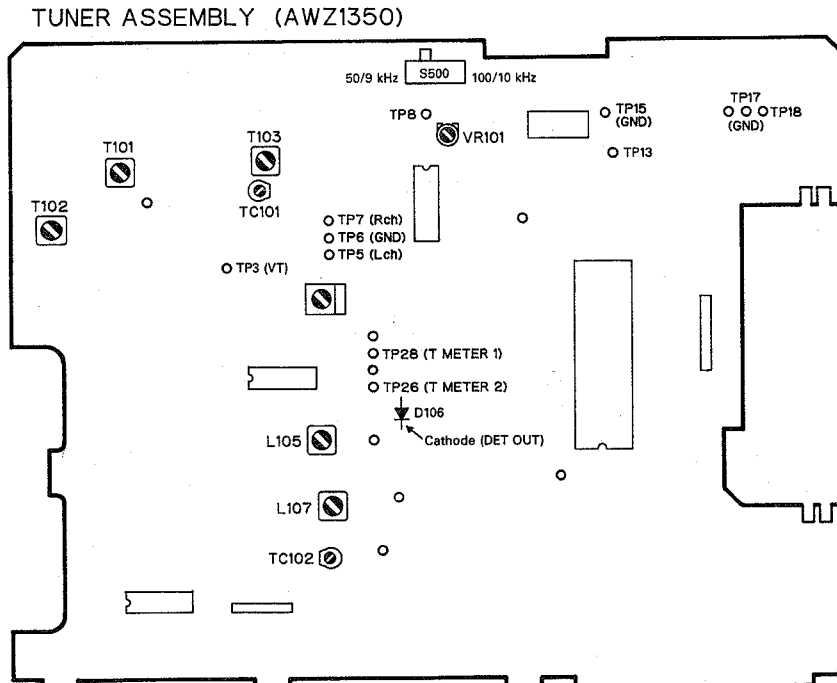


Fig. 8-3 Adjustment point

8. RÉGLAGE

PRÉPARATIFS

- S'assurer que l'interrupteur CHANNEL STEP (S500) est sur la position 100/10kHz (placer le type TX-1080Z/Z sur 100/10kHz ou 50/9kHz, comme requis).
- Raccorder TP15 (Terre) à TP17 (Terre).
- Fournir un courant continu de 12 V entre TP18 et TP17, et entre TP13 et TP15 (voir Fig. 8-3).

Réglage du tuner FM

- Effectuer les connexions des fils de la façon indiquée dans la Fig. 8-1.
- Régler la fonction sur FM.
- L'emplacement du réglage et le point de test sont situés dans l'assemblage du démodulateur (AWZ1350).

Etape N°	FM SG (1kHz ± 75kHz dév.)		TX-1080Z Affichage de fréquence de réception	Réglage	
	Fréquence (MHz)	Niveau (dBμ)		Lieu de réglage	Caractéristiques
1	98,0	60	98,0MHz	L105	Ajuster de telle façon que la tension CC soit de 0V ± 0,1V pour TP28 (T METER 1) et TP26 (T METER 2).
2 (*3)	98,0	60	98,0MHz	T101, T102	Ajuster la tension de la borne de sortie (TP5: canal gauche, TP7: canal droit) au maximum.
3	—	—	98,0MHz	VR101	La mise à la masse de la cathode D105 par un condensateur de 220μF place la fréquence TP8 sur 76kHz ± 200Hz.
4	98,0 *1 (modulation stéréo)	60	98,0MHz	T102	Ajuster la distortion de la borne de sortie (TP5: canal gauche, TP7: canal droit) au minimum.

(*1) Modulation stéréo: Déviation principale de 1kHz G + D ± 68,25Hz
Déviation pilote de 19kHz ± 6,75kHz

Réglage du Tuner AM

- Effectuer les connexions comme indiqué dans la Fig. 8-2.
- Régler la fonction sur AM.
- L'emplacement du réglage et le point de test sont situés dans l'assemblage du démodulateur (AWZ1350).

Etape N°	AM SG (400Hz, 30% modulation)		TX-1080Z Affichage de fréquence de réception	Réglage	
	Fréquence (kHz)	Niveau (dBμ)		Lieu de réglage	Caractéristiques
1	—	—	*2 530kHz	L107	Ajuster TP3 (VT) sur 1,3V ± 0,1V.
2	—	—	*3 1700kHz	TC102	Ajuster TP3 (VT) sur 10V ± 0,5V.
3	*4 603	Niveau auquel la sortie n'est pas saturée.	*4 603kHz	T103	Ajuster la tension de la borne de sortie (TP5: canal gauche, TP7: canal droit) au maximum.
4	*5 1395		*5 1395kHz	TC101	

(*2) 531kHz lorsque S500 du type TX-1080Z/Z est sur 50/9kHz.

(*3) 1602kHz lorsque S500 du type TX-1080Z/Z est sur 50/9kHz.

(*4) 600kHz lorsque S500 du type TX-1080Z/Z est sur 50/9kHz.

(*5) 1400kHz lorsque S500 du type TX-1080Z/Z est sur 50/9kHz.

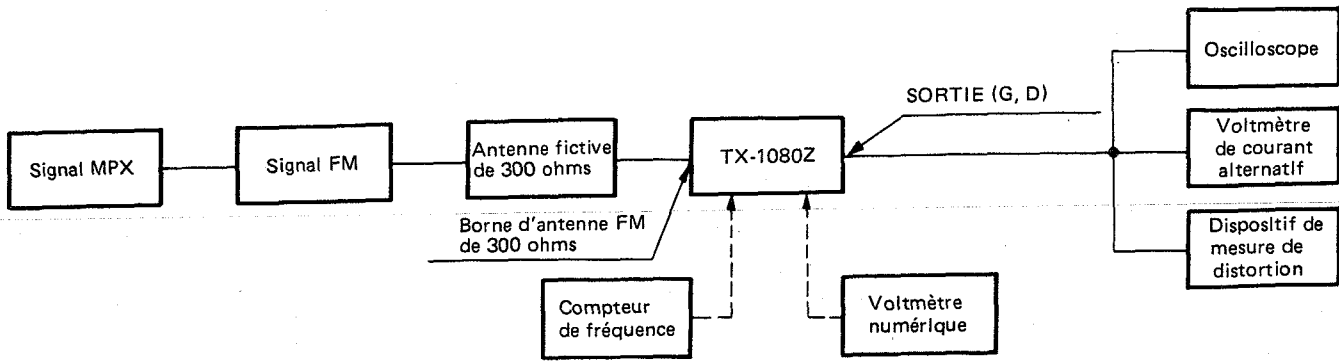


Fig. 8-1 Connexion du tuner FM

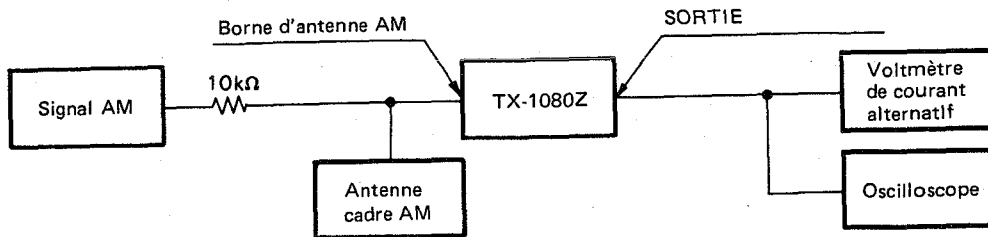


Fig. 8-2 Connexion du tuner AM

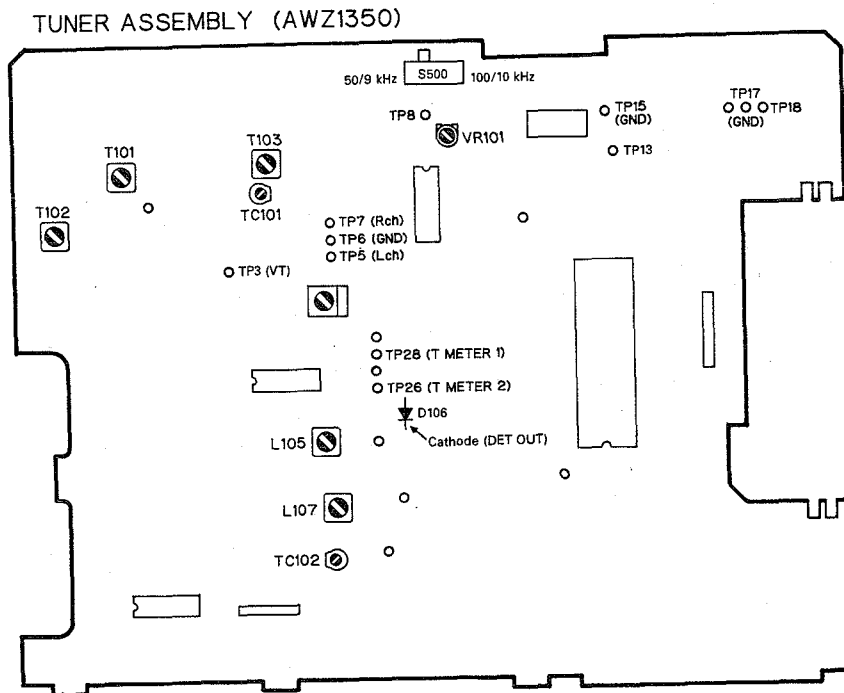


Fig. 8-3 Positions de réglage

8. AJUSTE

PREPARATIVOS

- Asegúrese de que el conmutador CHANNEL STEP (S500) esté en la posición 100/10 kHz. (Ajuste el tipo TX-1080Z/Z a 100/10 kHz o 50/9 kHz, según sea necesario.)
- Conecte TP15 (masa) con TP17 (masa).
- Aplique 12V CC entre TP18 y TP17, y entre TP13 y TP15 (consulte la Fig. 8-3).

Ajuste del sintonizador de FM

- Realice las conexiones como se muestra en la Fig. 8-1.
- Ponga el selector de función en FM.
- El lugar de ajuste y el punto de prueba están en el conjunto del sintonizador (AWZ1350).

No. de paso	FM SG (1kHz ± 75kHz dev.)		TX-1080Z Frecuencímetro de recepción	Ajuste	
	Frecuencia (MHz)	Nivel (dBμ)		Lugar de ajuste	Especificaciones
1	98,0	60	98,0MHz	L105	Ajuste de forma que la tensión de CC sea de 0V ± 0,1V para TP28 (T METER 1) y TP26 (T METER 2).
2	98,0	60	98,0MHz	T101, T102	Ajuste la tensión del terminal de salida (TP5: canal izquierdo, TP7: canal derecho) al máximo valor.
3 (*3)	—	—	98,0MHz	VR101	La puesta a masa del cátodo de D105 a través de un capacitor de 220μF ajustará la frecuencia de TP8 a 76kHz ± 200Hz.
4	98,0 *1 (modulación estéreo)	60	98,0MHz	T102	Ajuste la distorsión del terminal de salida (TP5: canal izquierdo, TP7: canal derecho) al mínimo estéreo)

(*1) Modulación estéreo: Principal 1kHz canal izquierdo + canal derecho ± 68,25Hz de desviación
Piloto 19kHz ± 6,75kHz de desviación

Ajuste del Sintonizador de AM

- Realice las conexiones como se muestra en la Fig. 8-2.
- Ponga el selector de función en AM.
- El lugar de ajuste y el punto de prueba están en el conjunto del sintonizador (AWZ1350).

No. de paso	AM SG (400Hz, 30% modulation)		TX-1080Z Frecuencímetro de recepción	Ajuste	
	Frecuencia (kHz)	Nivel (dBμ)		Lugar de ajuste	Especificaciones
1	—	—	*2 530 kHz	L107	Ajuste TP3 (VT) a 1,3V ± 0,1V.
2	—	—	*3 1700 kHz	TC102	Ajuste TP3 (VT) a 10V ± 0,5V.
3	*4 603	Nivel en el que la salida no se satura	*4 603 kHz	T103	Ajuste la tensión del terminal de salida (TP5: canal izquierdo, TP7: canal derecho) al máximo valor.
4	*5 1395		*5 1395 kHz	TC101	

(*2) 531 kHz cuando S500 del tipo TX-1080Z/Z esté ajustado a 50/9 kHz.

(*3) 1602 kHz cuando S500 del tipo TX-1080Z/Z esté ajustado a 50/9 kHz.

(*4) 600 kHz cuando S500 del tipo TX-1080Z/Z esté ajustado a 50/9 kHz.

(*5) 1400 kHz cuando S500 del tipo TX-1080Z/Z esté ajustado a 50/9 kHz.

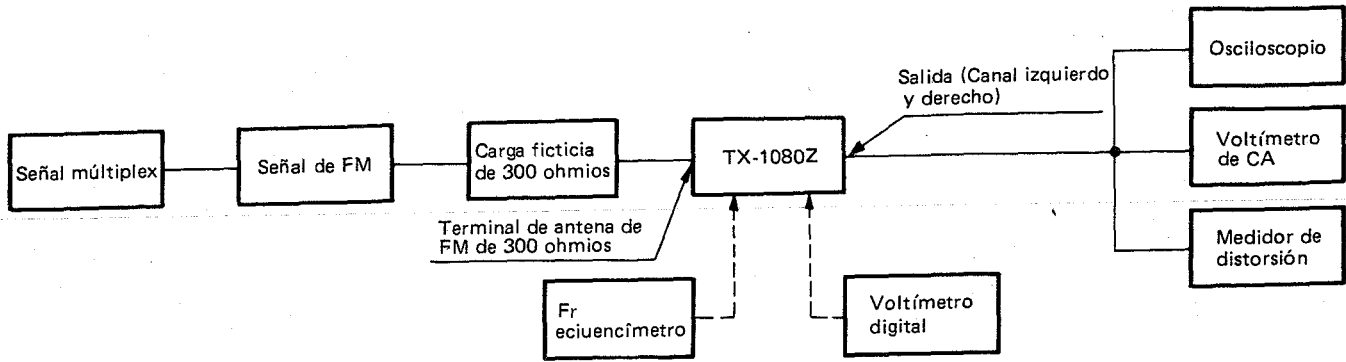


Fig. 8-1 Conexiones del sintonizador de FM

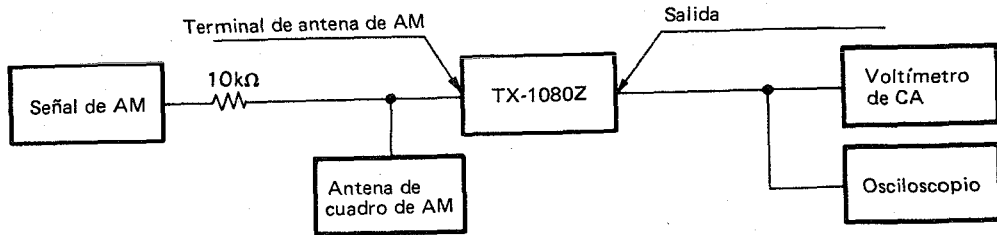


Fig. 8-2 Conexiones del sintonizador de AM

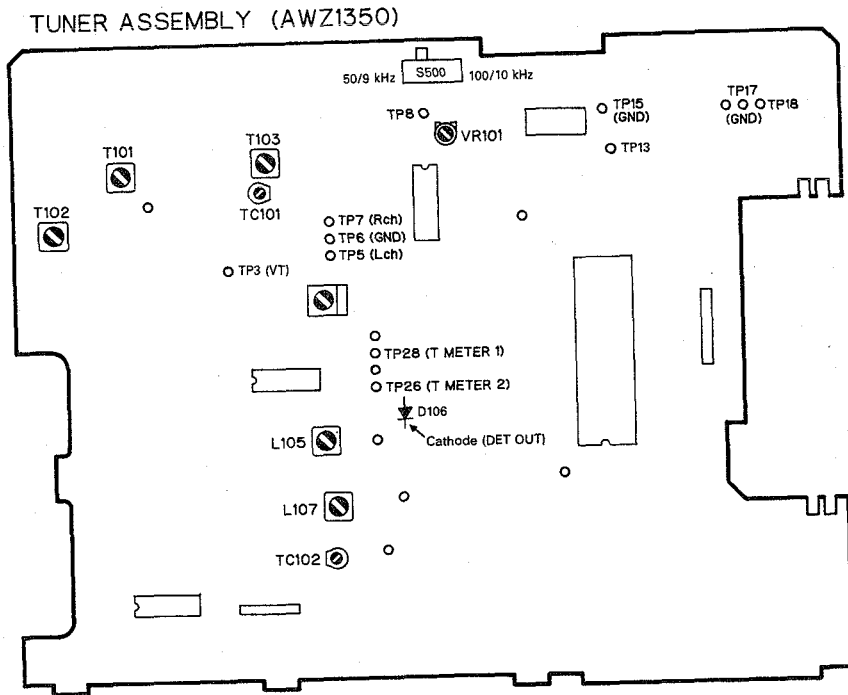


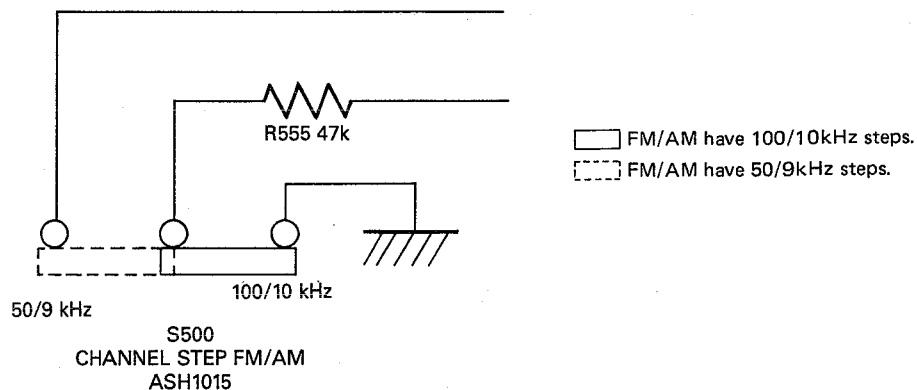
Fig. 8-3 Posiciones de ajuste

9. FOR Z TYPE

9.1 DIFFERENCES BETWEEN THE Z/UC TYPE AND Z TYPE

Exactly the same parts are used to configure the Z type and Z/UC type. The difference between the Z type and Z/UC type is that the FM/AM CHANNEL STEP switch (S500) is set to 100/10 kHz for the Z/UC type and to 50/9kHz for the Z type at the factory. Set the Z type to the channel step for the area where used, as shown in the schematic diagram below. (The Z/UC type should be left at 100/10kHz.)

● SCHEMATIC DIAGRAM



9.2 PACKING OF OPERATING INSTRUCTIONS

In some cases, the TX-1080Z/Z type is sold together with the Model SA-1480/SD type, SD/G type, SA-1280/SD type and SD/G type as a Combination system. Consequently, the operating instructions include these models and are packed with the Model SA-1480/SD type, SD/G type, SA-1280/SD type and SD/G type.

● Parts List of Operating Instructions (TX-1080Z/Z Type)

Part No.	Model
ARB1070	Stereo Amplifier SA-1480/SD and SD/G types (English)
ARC1053	Stereo Amplifier SA-1480/SD type only (Spanish)
ARB1069	Stereo Amplifier SA-1280/SD and SD/G types (English)
ARC1052	Stereo Amplifier SA-1280/SD type only (Spanish)