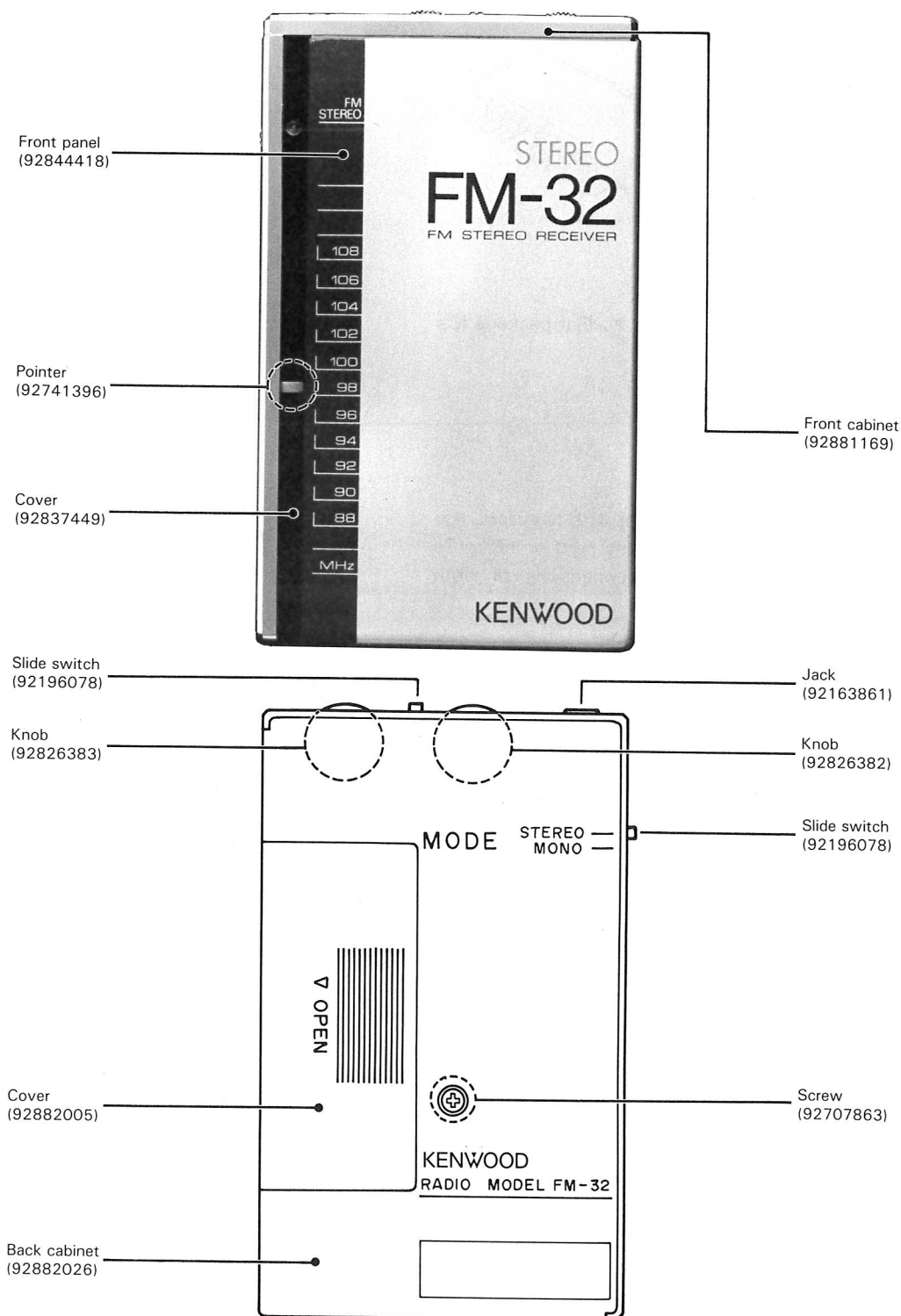


KENWOOD

FM-32

FM STEREO RECEIVER



*Refer to Parts List on page 10.

NOTES ON CHIP COMPONENTS

Chip components are included in the components mounted on the foil side of the PC board in the FM-32. Please read the notes on handling the chips before starting to make repairs.

Replacement of chip components

1. Caution on treatment

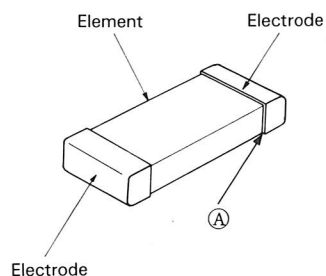


Fig. 1 Chip capacitors and resistors

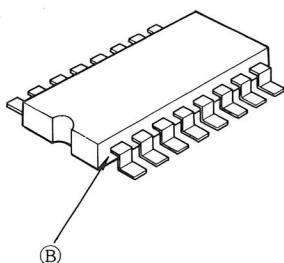
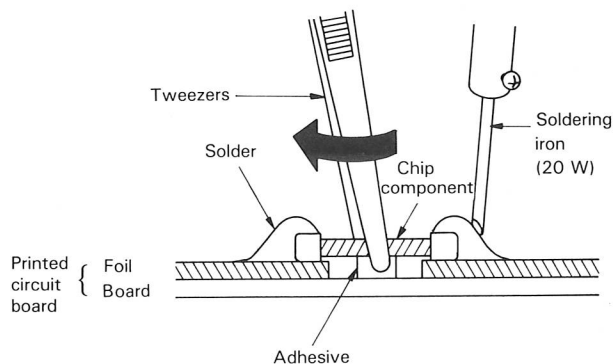


Fig. 2 Flat package ICs

Type	Notes
Chip capacitor [brown, white, or green on both sides]	The element may crack if it or its electrodes are heated abruptly. Use a small capacity soldering iron (one with a capacity of 20 W and a tip diameter of 3 mm is suitable.) Chip components are very fragile and break easily if subjected to excessive force. Therefore, be careful when handling them. Do not reuse chips which have been removed from the board.
Chip resistor [Top: black Bottom: white]	These chips are highly heat-resistant, and will not break even if dipped in a solder bath. There is no need of special care in handling it, but note that the point indicated by A is vulnerable to a force.
Flat package IC	These chips can be soldered in the normal manner. However, handle them carefully since the pins are easily broken off at the base B.

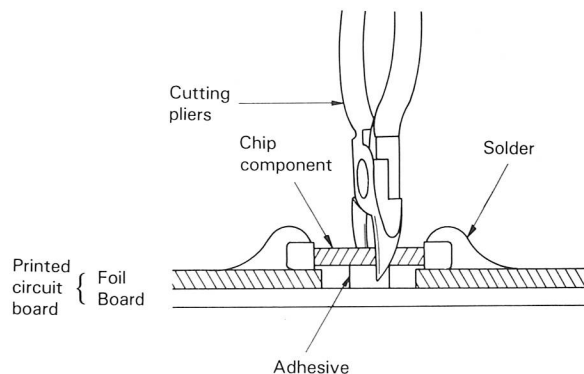
2. Removal method

(Method 1) Grip the chip at the center with tweezers. Apply force to rotate it to the right or left while heating the soldered connections of both ends alternately.



(Method 2) Cut the chip in two at the center with cutting pliers, then melt the soldered connections with a soldering iron and remove the fragments.

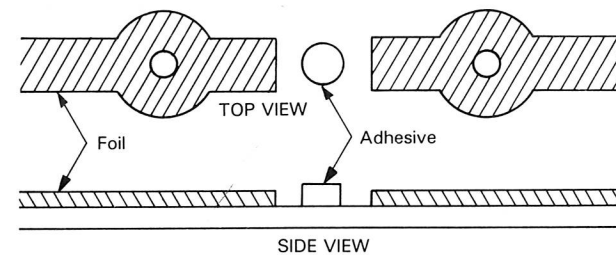
Note: Since the components are not to be used once they have been removed, method 2 is more convenient. However, some flat package ICs can be reused if they are carefully removed without breaking the pins.



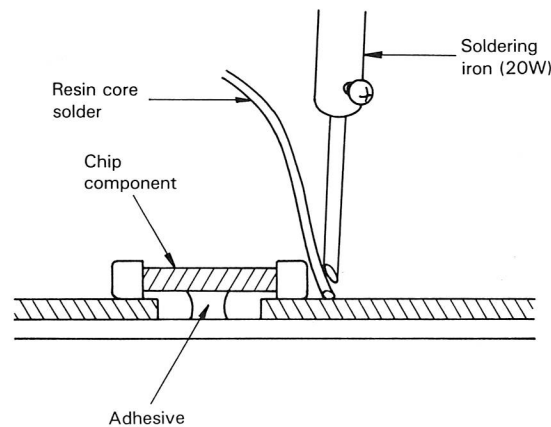
NOTES ON CHIP COMPONENTS

3. Installation

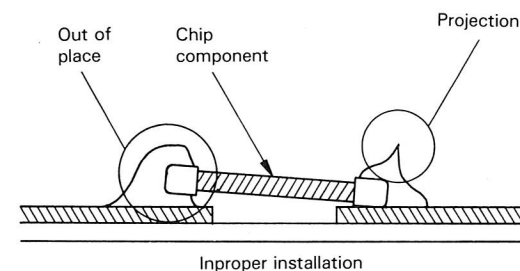
- (I) Clean all the adhesive and solder from the surface.
- (II) When it is difficult to solder a chip because it moves, use the procedure described in (III) or hold the chip with tweezers. Otherwise, omit the procedure in (III).
- (III) Apply adhesive (contact cement or the like) to the board surface at the point corresponding to the center of the chip. The thickness of the adhesive coat should be about 0.1 to 0.2 mm so that it is not squeezed out when the chip is mounted. Put the new chip on the pattern and wait until the cement sets.



- (IV) Quickly solder the chip as shown in the figure below. Do not apply the soldering iron directly to the electrodes of the chip. Place resin core solder between the chip terminal and the tip of the iron.



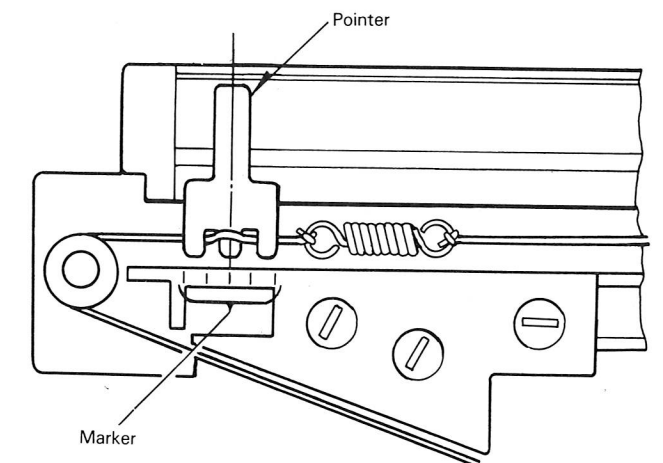
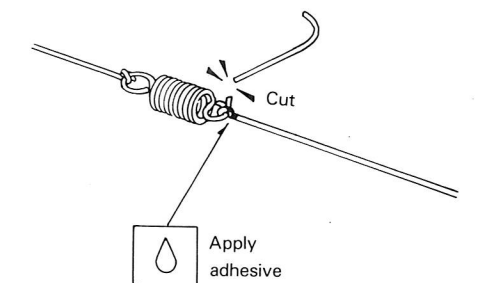
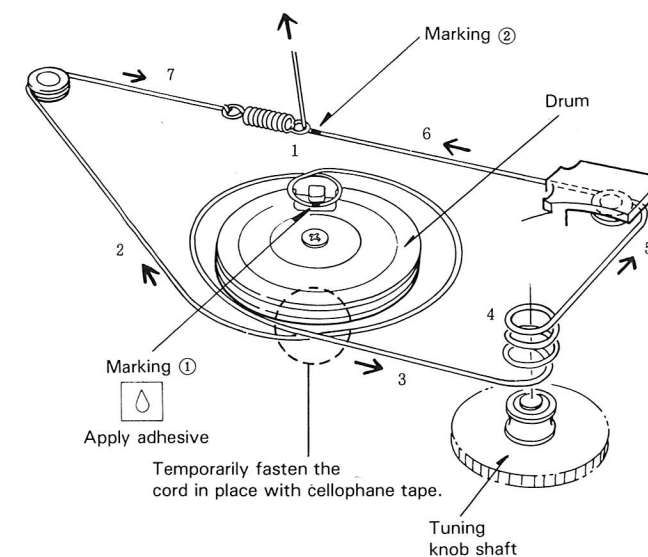
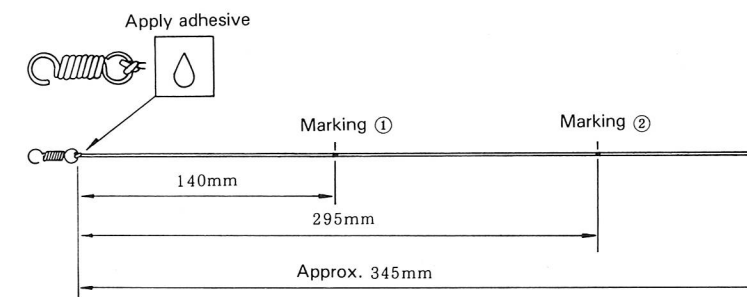
- (V) Confirm the following points.
 - (1) Ensure that the electrodes of the chip are in contact with the foil.
 - (2) Ensure that there are no solder projections. Projections may come in contact with the aluminum case, etc., resulting in a short.



DIAL CORD STRINGING

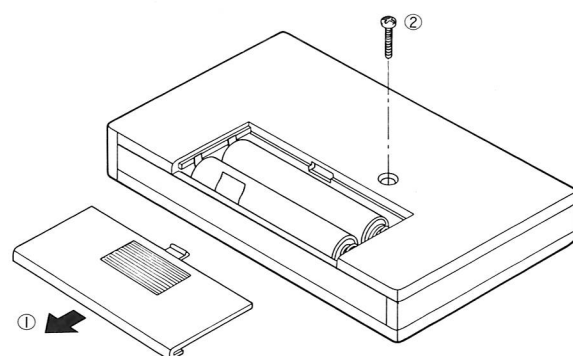
1. Tie the dial cord to the end of the dial spring with a double knot and fix the cord to the dial spring with adhesive.
2. Mark the cord at two points as shown in the figure.
3. Loop the part of the cord at marking ① around the hook on the drum mounted on the variable capacitor shaft and fix it to the hook with adhesive.
4. Wind the cord half way around the drum in both direction from the hook and temporarily fasten it in place with cellophane tape.
5. Retain the PC board to the chassis assembly by means of the chassis assembly claws and the tuning knob retaining nut.

6. Pass one end of the cord around the pulley and pull it in the direction by arrow 7.
7. Wind the other end of the cord around the tuning knob shaft 3 turns in counterclockwise direction and pull it in the direction indicated by arrows 5 and 6. Pass it through the hook at the other end of the dial spring.
8. Tie the cord to the hook at marking ②, fix the knot with adhesive, then cut off the excess cord.
9. Rotate the tuning knob counterclockwise until it stops.
10. Align the pointer to the center mark of the chassis ass'y and fix it there.

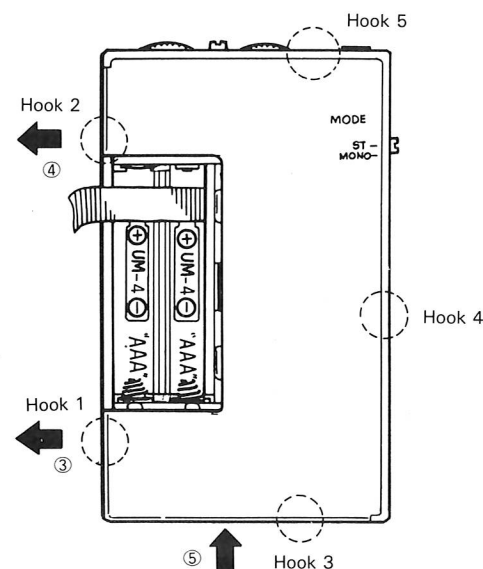


DISASSEMBLY FOR REPAIR

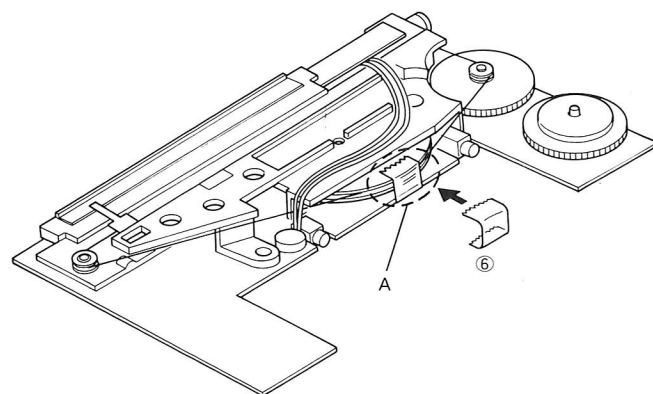
1. Rotate the tuning knob counterclockwise until the pointer is at the lowest frequency, remove the battery cover assembly (①), then remove the screw (②).



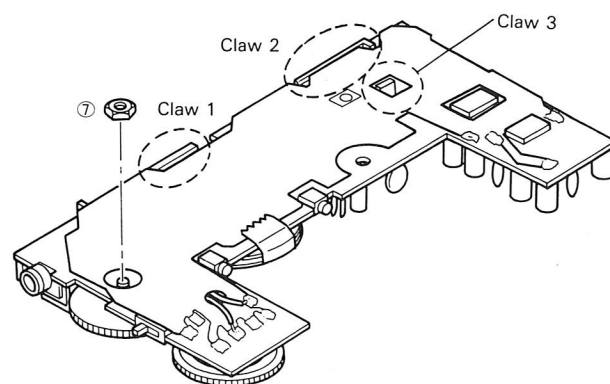
2. Disengage the 5 hooks from the back cabinet ass'y as follows.
3. Disengage the hook at the side of the battery compartment by pulling the front cabinet assembly outward (③, ④).
4. Disengage the hook at the bottom of the FM-32 (the side on which there are not switches) by lightly pushing the back cabinet ass'y in the direction indicated by arrow ⑤. This makes it possible to separate the back cabinet ass'y and the front cabinet assembly apart. To replace ICs and other chip components, it may be necessary to remove the flexible PC board.



5. Securely fasten the dial cord to the variable capacitor drum at A with cellophane tape so that it does not come off of the drum (⑥).



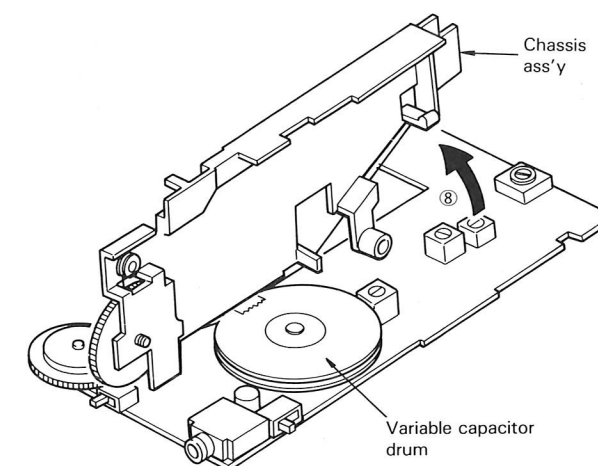
6. Remove the tuning knob shaft retaining nut at the side of the flexible PC board (⑦).
7. Disengage the 3 chassis claws from the board.



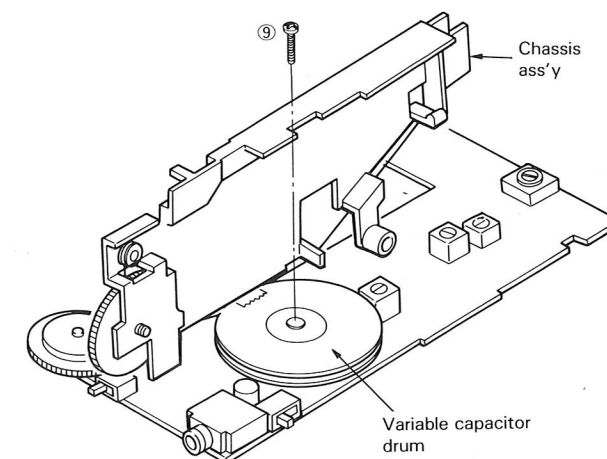
DISASSEMBLY FOR REPAIR

8. Raise the chassis assembly (⑧). When doing so, be careful to prevent the cord from coming off of the drum.

Most parts can be replaced in this condition. When it is necessary to replace parts Q001 to 003 under the variable capacitor drum, remove the variable capacitor as follows.

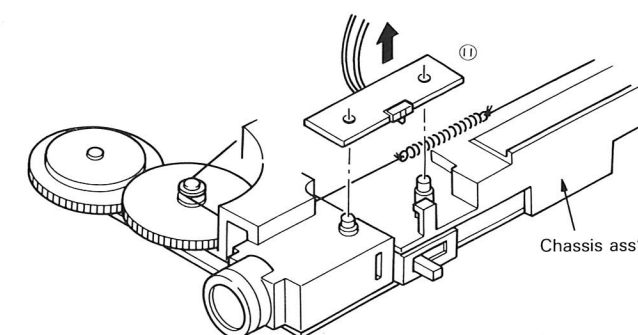
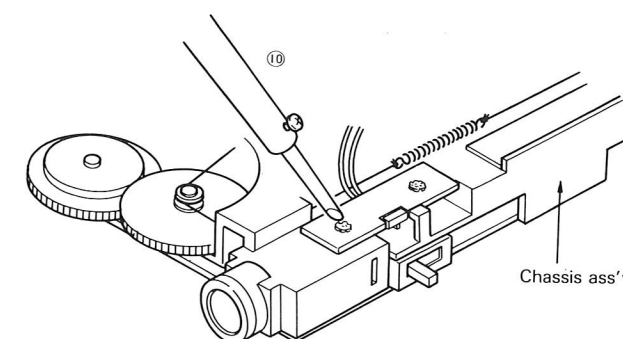


9. Remove the variable capacitor drum retaining screw (⑨).
10. Confirm that the cord does not come off of the drum and remove the drum from the variable capacitor.



D201 replacement (Stereo mode LED indicator on the chassis assembly)

1. The base of the LED board is fastened to the chassis assembly with melted plastic. Melt the plastic with a soldering iron and remove the LED board.
2. After replacing the LED, replace the base at its position and fasten it with adhesive or by melting other plastic with a soldering iron.



ADJUSTMENT / REGLAGE

ADJUSTMENT

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION Unless otherwise specified the individual switches should be set as follows: MODE : ST							
1	IF	Sweep generator: 10.7 MHz Connect a loop antenna ($\phi 10$ cm) to RF OUT terminal and place it near T101.	Connect TP3 and V terminal of oscil- loscope via 10 k Ω and 0.1 μ F. Connect H OUT of sweep gene- rator and H terminal of oscilloscope.	Near lowest frequency where noise is absent	T103	Turn T103 counterclockwise and detune	(a)
					T101 T102	Maximum amplitude	
					T103	Symmetry of the oscilloscope display	
2	TRACKING (1)	(A) 87.5 MHz 1 kHz $\pm$ 75 kHz dev 60 dB (ANT input)	(B)	87.5 MHz (Lowest frequency)	L002	Maximum amplitude	
3	TRACKING (2)	(A) 108.0 MHz 1 kHz $\pm$ 75 kHz dev 60 dB (ANT input)	(B)	108.0 MHz (Highest frequency)	C003	Maximum amplitude	
Repeat alignments 2 and 3 several times.							
4	TRACKING (3)	(A) 90.0 MHz 1 kHz $\pm$ 75 kHz dev 60 dB (ANT input)	(B)	90.0 MHz	L001	Maximum amplitude	
5	TRACKING (4)	(A) 106.0 MHz 1 kHz $\pm$ 75 kHz dev 60 dB (ANT input)	(B)	106.0 MHz	C002	Maximum amplitude	
Repeat alignments 4 and 5 several times.							
6	VCO	(A) 98.0 MHz 0 dev 60 dB (ANT input)	Connect a frequency counter to pin 9 of Q201 via the filter (150 k Ω and 1000 pF) and an AC voltmeter.	98.0 MHz	R201	76.00 kHz	(b)

REGLAGES

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINTS DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF Sauf en cas d'indications spéciales, régler chaque commutateur comme suit: MODE : ST							
1	F.I.	Générateur de balayage: 10,7 MHz Connecter l'antenne boucle ($\phi 10$ cm) à la borne de RF OUT et placer l'antenne boucle près de T101.	Connecter TP3 et la borne V de l'oscil- loscope par 10 k Ω et 0.1 μ F. Connecter la borne H OUT au générateur de balayage et à la borne H de l'oscilloscope.	Auprès de la fréquence minimale où tout bruitage est absent.	T103	Tourner T103 dans le sens inverse des aiguilles d'une montre et dérégler.	(a)
					T101 T102	Amplitude maximale	
					T103	Symétrie maximale de l'affichage de l'oscilloscope	
2	ALIGNEMENT (1)	(A) 87,5 MHz 1 kHz $\pm$ 75 kHz dév 60 dB (Entrée ANT)	(B)	87,5 MHz (Fréquence minimale)	L002	Amplitude maximale	
3	ALIGNEMENT (2)	(A) 108,0 MHz 1 kHz $\pm$ 75 kHz dév 60 dB (Entrée ANT)	(B)	108,0 MHz (Fréquence maximale)	C003	Amplitude maximale	
Répéter les points 2 et 3 plusieurs fois							

REGLAGE / ABGLEICH

REGLAGES

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINTS DE L'ALIGNEMENT	ALIGNER POUR	FIG.
4	ALIGNEMENT (3)	(A) 90,0 MHz 1 kHz $\pm$ 75 kHz d�v 60 dB (Entr�e ANT)	(B)	90,0 MHz	L001	Amplitude maximale	
5	ALIGNEMENT (4)	(A) 106,0 MHz 1 kHz $\pm$ 75 kHz d�v 60 dB (Entr�e ANT)	(B)	106,0 MHz	C002	Amplitude maximale	
R�p�ter les point 4 et 5 plusieurs fois							
6	OSCILLATEUR CONTROLE PAR LA TENSION	(A) 98,0 MHz 0 d�v 60 dB (Entr�e ANT)	Connecter un comp- teur de frequence � la fiche 9 de Q201 par l'intermediaire du filtre (150 k� et 1000 pF) et d'un voltm�tre CA.	98,0 MHz	R201	76,00 kHz	(b)

ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN F�R	ABB.
UKW-EMPfangSABTEILUNG Au�er wenn anders angegeben, die verschiedenen Schalter wie folgt einstellen: MODE : ST							
1	ZF	Ablenkgenerator: 10,7 MHz Die Rahmenantenne (�10 cm) zur RF-OUT- Klemme anschlie�en und stellen sie nahe T101 gelegen.	Das TP3 und V-Klemme des Oszilloskopes �ber einen Filter (10 k� und 0.1 �F) anschlie�en. Das H-OUT-Klemme des Ablenkgenerators und H-Klemme des Ozilloskopes anschlie�en.	Nahe Minimalster Frequenz wo kein Rauschen nach abwesend.	T103	T103 entgegen dem Uhrzeigersinn drehen und verstimmer.	(a)
					T101 T102	Maximale amplitude	
					T103	Symmetrie des Oszilloskopbildes	
2	EMPfangSBEREICH (1)	(A) 87,5 MHz 1 kHz $\pm$ 75 kHz Hub 60 dB (ANT-Eingang)	(B)	87,5 MHz (Minimaler Frequenz)	L002	Maximale amplitude	
3	EMPfangSBEREICH (2)	(A) 108,0 MHz 1 kHz $\pm$ 75 kHz Hub 60 dB (ANT-Eingang)	(B)	108,0 MHz (Miximale Frequenz)	C003	Maximale amplitude	
Abstimmungen 2 und 3 mehrere Male wiederholen.							
4	EMPfangSBEREICH (3)	(A) 90,0 MHz 1 kHz $\pm$ 75 kHz Hub 60 dB (ANT-Eingang)	(B)	90,0 MHz	L001	Maximale amplitude	
5	EMPfangSBEREICH (4)	(A) 106,0 MHz 1 kHz $\pm$ 75 kHz Hub 60 dB (ANT-Eingang)	(B)	106,0 MHz	C002	Maximale amplitude	
Abstimmungen 4 und 5 mehrere Male wiederholen.							
6	SPANNUNGS- GEREGELTER OSZILLATOR	(A) 98,0 MHz 0 Hub 60 dB (ANT-Eingang)	Eine Frequenzmesser zu Klemme 9 von Q201 �ber Filter (150 k� und 1000 pF) und einen Wechselspan- nungsmesser anschlie�en.	98,0 MHz	R201	76,00 MHz	(b)

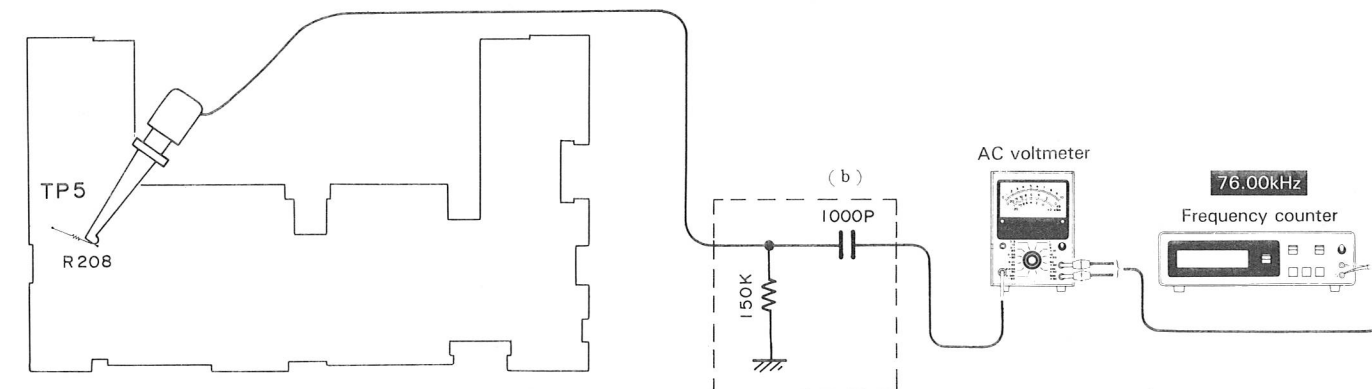
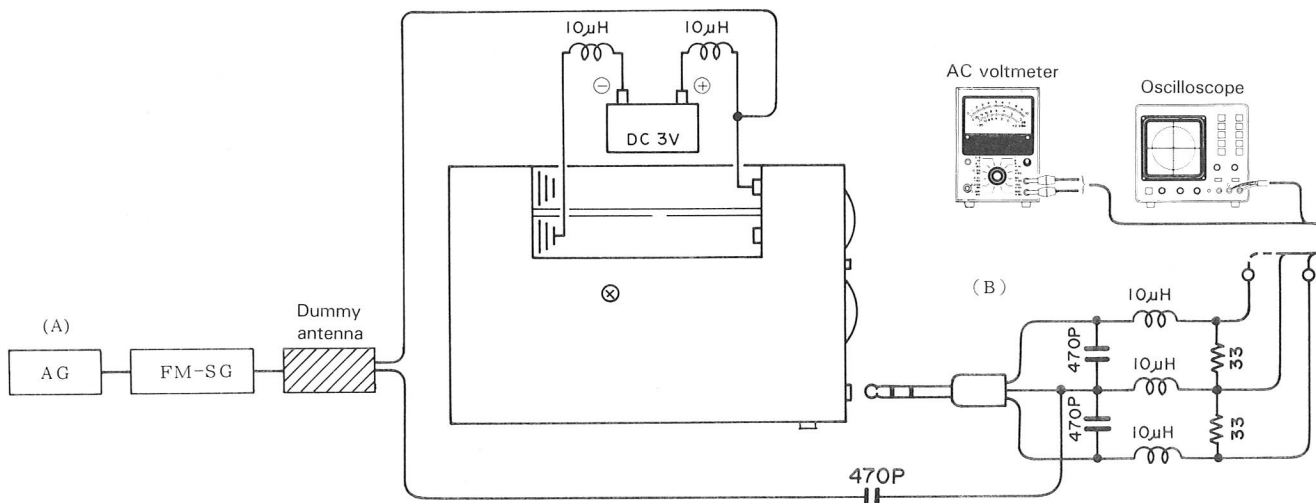
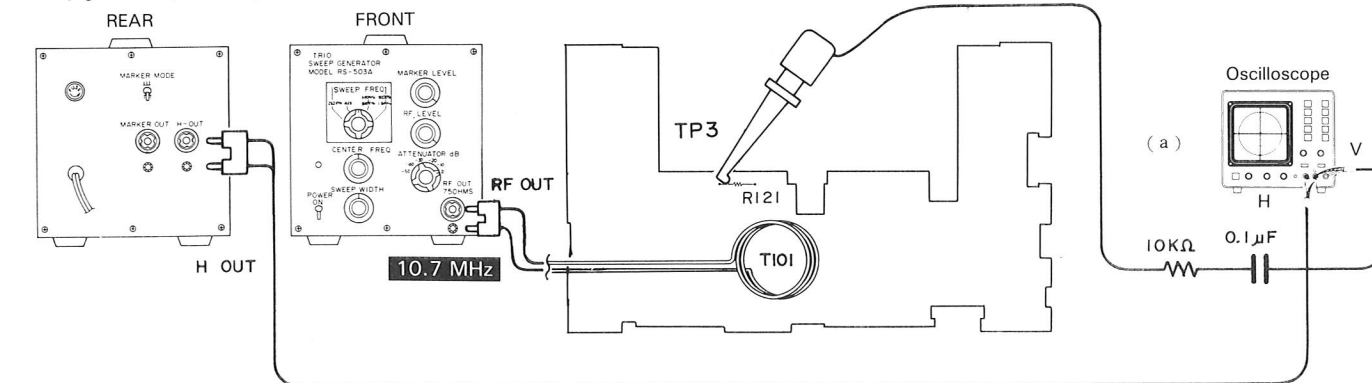
ADJUSTMENT/REGLAGE / ABGLEICH

TEST INSTRUMENT

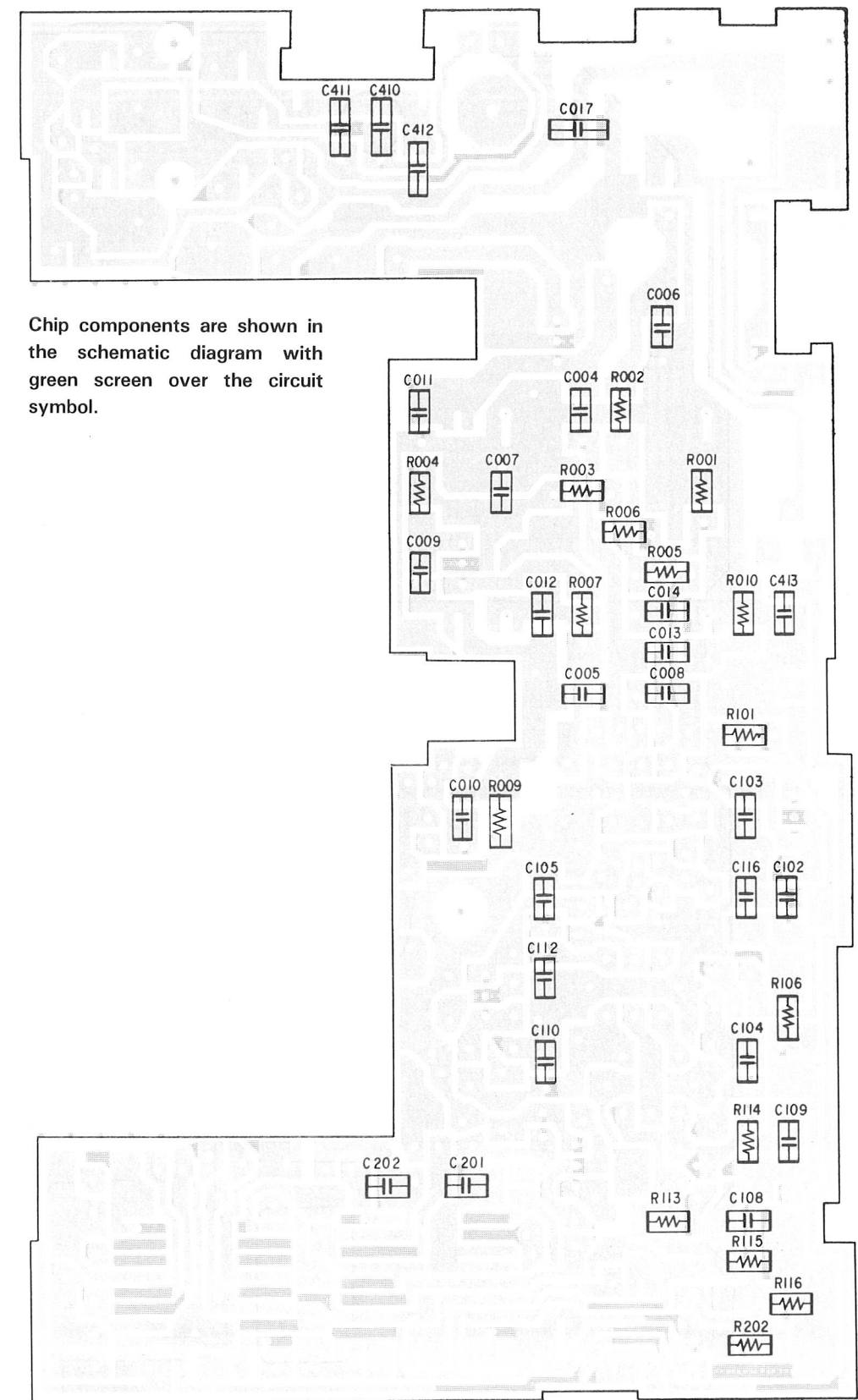
Oscilloscope	Oscilloscope	Oszilloskop	SCOPE
AM signal generator	Générateur MA	MW-Signalgenerator	AM-SG
FM signal generator	Générateur MF	UKW-Signalgenerator	FM-SG
Audio generator	Générateur audio fréquences	NF-Signalgenerator	AG
AC voltmeter	Voltmètre CA	Wechselspannungsmesser	
FM multiplex generator	Générateur multiplex stéréo	UKW-Multiplexgenerator	FM-MPX
Frequency counter	Fréquence-mètre	Frequenzzähler	
DC voltmeter	Voltmètre CC	Gleichspannungsmesser	
Distortion meter	Distorsiomètre	Klirrfaktormesser	
Dummy antenna	Antenne fictive	Antennennachbildung	

SYSTEM CONNECTIONS/RACCORDEMENTS DU SYSTEME/SYSTEM-ANSCHLÜSSE

Sweep generator (RS-503A)



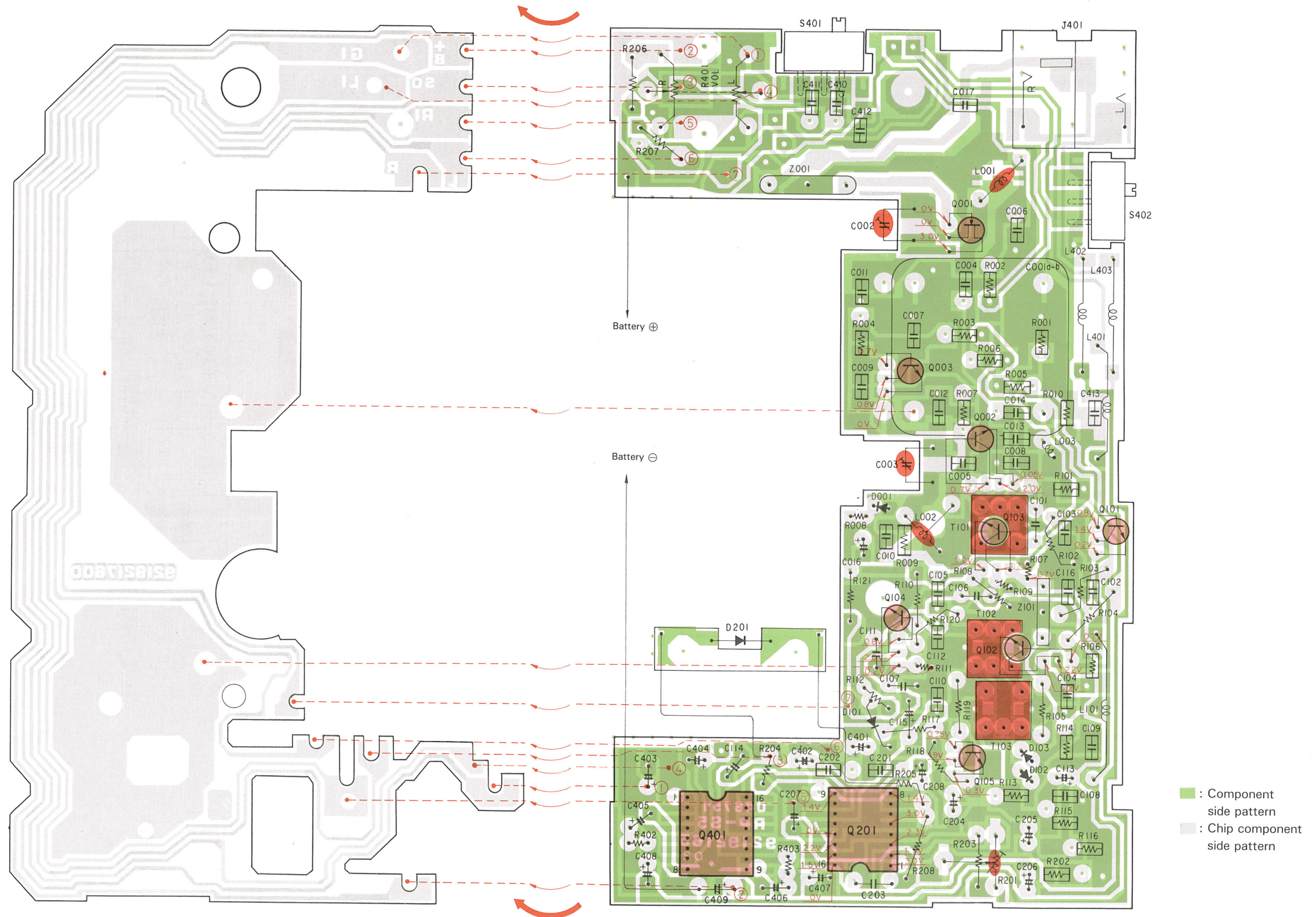
CHIP COMPONENTS LOCATION



Chip components are shown in the schematic diagram with green screen over the circuit symbol.

Refer to the schematic diagram for the values of resistors and capacitors.
The PC board drawing is viewing from the side easy to check.

PC BOARD



The flexible pc board above is turned over and soldered at the dot (•) on the ends of the broken line.

Refer to the schematic diagram for the values of resistors and capacitors.
The PC board drawing is viewing from the side easy to check.



SPECIFICATIONS

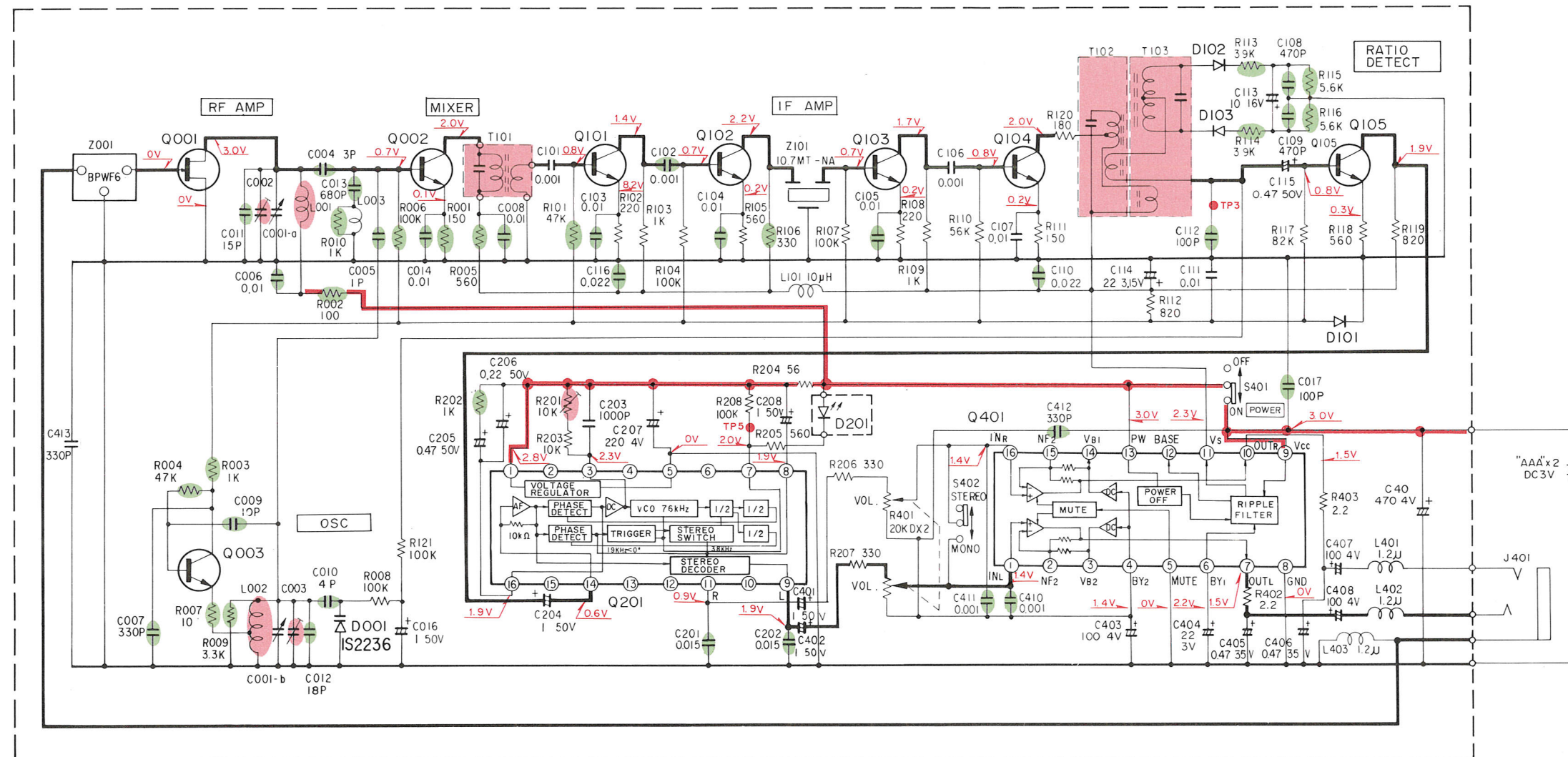
Frequency rangeFM 88 – 108 MHz
 Power requirementsDC 3 V, UM-4 x 2 pcs.
 Power output30 mW (max.)
 JackMini jack for stereo headphones
 (32 ohms)/earphone(8 ohms)
 Dimensions
 (W x H x D)55 x 91 x 12.5 (mm)
 Weight75 g (Including batteries)
 AccessoriesStereo headphones

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

- DC voltages are measured by a VOM of 20 k Ω /V input impedance.
- Les tensions de courant continu sont mesurées par un multimètre d'une impédance d'entrée de 20 k Ω /V.
- Die Gleichstrom-Spannungen werden durch ein Vielfachmeßgerät von 20 k Ω /V Eingangs-Impedanz gemessen.



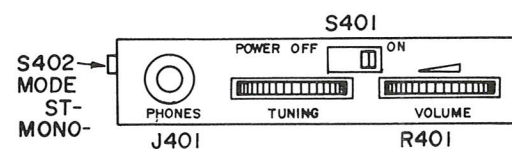
Q001 : 2SK193(UF)
 Q002,003,101,102,104 : 2SC2668(O)
 Q103,105 : 2SC2669(O)
 Q201 : TA7342F
 Q401 : TA7688F
 D001 : IS2236
 D101 : KB-269
 D102,103 : HP-80
 D201 : TLR121

● : Chip component

2SC 2668
 2SC 2669

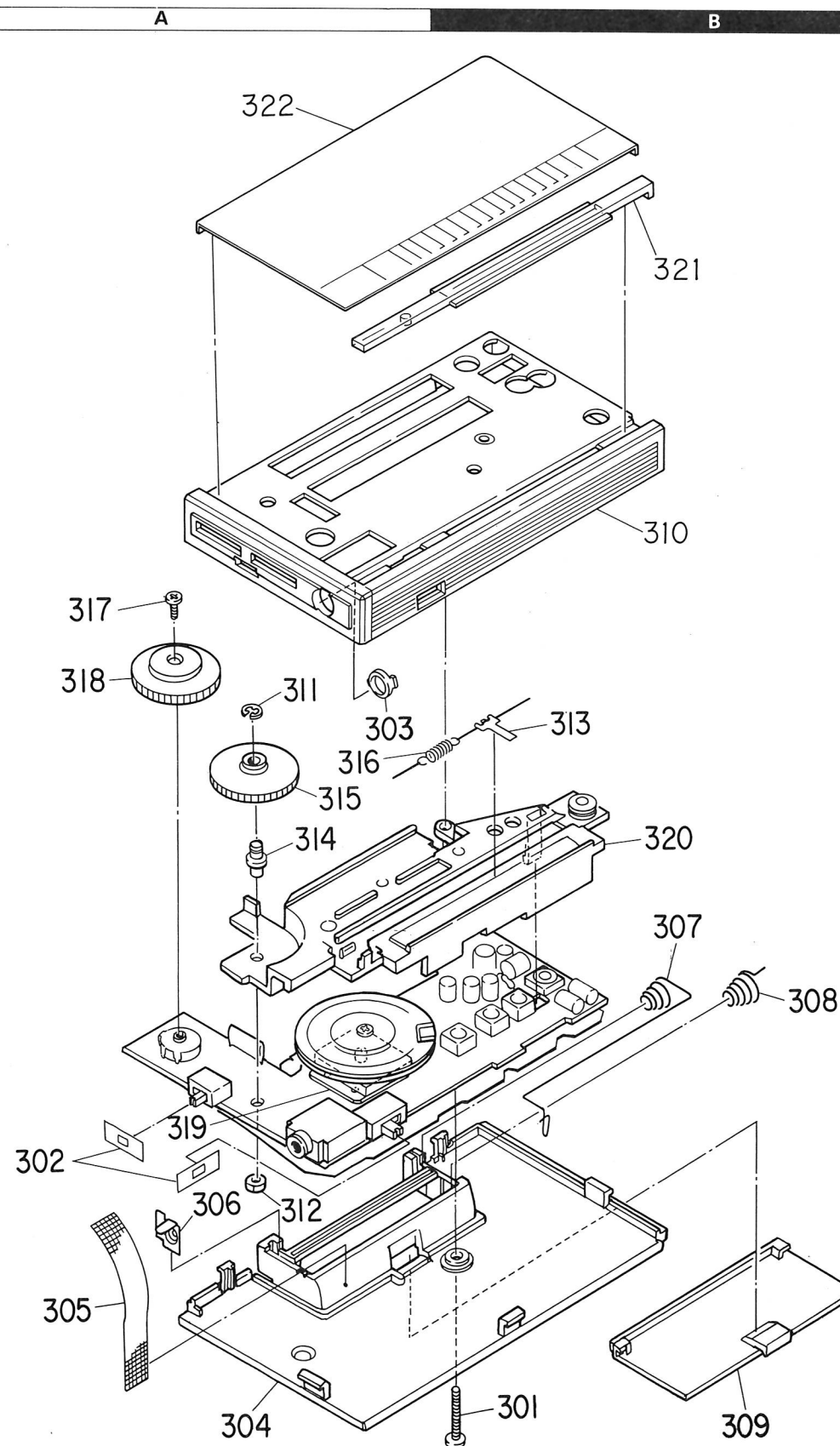
2SK 193

TA 7342
 TA 7688



FM-32(E)

EXPLODED VIEW



FM-32

PARTS LIST

* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
FM-32						
301	3B	*	92707863	SCREW Ø2X10		
302	3A	*	92753132	COVER (SWITCH)		
303	2A	*	92875040	COVER (HEADPHONE JACK)		
304	3A	*	92882026	BACK CABINET		
305	3A	*	92723289	RIBBON (BATTERY)		
306	3A	*	92725251	BATTERY CONTACT A		
307	2B	*	95777145	BATTERY CONTACT B		
308	2B	*	95777146	BATTERY CONTACT C		
309	3B	*	92882005	COVER (BATTERY)		
310	1B	*	92881169	FRONT CABINET		
311	2A	*	74050015	E RING Ø1.5		
312	3A	*	92702188	NUT Ø2		
313	2B	*	92741396	POINTER		
314	2A	*	92743310	SHAFT (TUNING KNOB)		
315	2A	*	92826382	KNOB (TUNING)		
316	2A	*	95776496	SPRING (DIAL CORD)		
317	2A	*	92707864	SCREW Ø1.4X3		
318	2A	*	92826383	KNOB (VOLUME)		
319	3A	*	92866195	VARIABLE CAPACITOR SHEET		
320	2B	*	92718179	CHASSIS ASSY		
321	1B	*	92837449	COVER (DIAL)		
322	1A	*	92844418	FRONT PANEL		
-		*	92152135	HEADPHONE ASSY		
-		*	92903551	INSTRUCTION MANUAL		
-		*	92920393	PRIMARY BOX (PLASTIC CASE)		
-		*	92933419	CUSHION (PACKING FIXTURE)		
-		*	92948031	PRIMARY COVER (PACKAGE COVER)		
P.C.B.						
C001		*	92308562	VARIABLE CAPACITOR		
C002,003		*	92309191	TRIMMING CAPACITOR		
C004		*	92360416	CHIP C 3PF C		
C005		*	92360413	CHIP C 1PF C		
C006		*	92340133	CHIP C 0.01UF K		
C007		*	92360441	CHIP C 330PF J		
C008		*	92340133	CHIP C 0.01UF K		
C009		*	92360423	CHIP C 10PF D		
C010		*	92360672	CHIP C 4PF D		
C011		*	92360425	CHIP C 12PF J		
C012		*	92360450	CHIP C 18PF J		
C013		*	92360445	CHIP C 680PF J		
C014		*	92340133	CHIP C 0.01UF K		
C016		*	92440554	ELECTRO 1UF 50WV		
C017		*	92360435	CHIP C 100PF J		
C101		*	92360366	CERAMIC 0.001UF K		
C102		*	92340129	CHIP C 0.001UF K		
C103-105		*	92340133	CHIP C 0.01UF K		
C106		*	92360366	CERAMIC 0.001UF K		
C107		*	92360604	CERAMIC 0.01UF M		
C108,109		*	92360443	CHIP C 470UF K		
C110		*	92340141	CHIP C 0.022UF K		
C111		*	92360604	CERAMIC 0.01UF M		
C112		*	92360435	CHIP C 100PF J		
C113		*	92440276	ELECTRO 10UF 16WV		

E: Scandinavia & Europe H: Audio Club K: USA

P: Canada

S: South Africa

T: England

U: PX (Far East, Hawaii)

UE: AAFES (Europe)

X: Australia

M: Other Areas

PARTS LIST

* New Parts

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 Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C114		*	92490003	TANTAL 22UF 3.15WV		
C115		*	92440532	ELECTR 0.47UF 50WV		
C116		*	92340141	CHIP C 0.022UF K		
C201,202		*	92340134	CHIP C 0.015UF M		
C203		*	92380071	POLYSTY 1000PF J		
C204		*	92440554	ELECTR 1UF 50WV		
C205		*	92440271	ELECTR 0.47UF 50WV		
C206		*	92440320	ELECTR 0.22UF 50WV		
C207		*	92440516	ELECTR 220UF 4WV		
C208		*	92440554	ELECTR 1UF 50WV		
C401,402		*	92440554	ELECTR 1UF 50WV		
C403		*	92440517	ELECTR 100UF 4WV		
C404		*	92440562	ELECTR 22UF 6.3WV		
C405,406		*	92490013	TANTAL 0.47UF 35WV		
C407,408		*	92440517	ELECTR 100UF 4WV		
C409		*	92440528	ELECTR 470UF 4WV		
C410,411		*	92340129	CHIP C 0.001UF K		
C412,413		*	92360441	CHIP C 330PF J		
J401		*	92163861	JACK Ø3.5 HEADPHONE		
L001		*	92235215	COIL (FM RF)		
L002		*	92235214	COIL (OSCILLATOR)		
L003		*	92235216	COIL (RF)		
L101		*	92291117	CHOKE COIL 10UH		
L401-403		*	92291128	CHOKE COIL 1.2UH		
T101		*	92265837	IF TRANSFORMER		
T102		*	92267380	IF TRANSFORMER		
T103		*	92267381	IF TRANSFORMER		
Z001		*	92153231	BAND-PASS FILTER		
Z101		*	92153250	CERAMIC FILTER		
R001		*	92501017	CHIP R 150 J 2B		
R002		*	92501015	CHIP R 100 J 2B		
R003		*	92501027	CHIP R 1K J 2B		
R004		*	92501047	CHIP R 47K J 2B		
R005		*	92501024	CHIP R 560 J 2B		
R006		*	92501051	CHIP R 100K J 2B		
R007		*	92501003	CHIP R 10 J 2B		
R008		*	92550204	RD 100K J 2B		
R009		*	92501033	CHIP R 3.3K J 2B		
R010		*	92501027	CHIP R 1K J 2B		
R101		*	92501047	CHIP R 47K J 2B		
R102		*	92540502	RD 220 J 2B		
R103		*	92540190	RD 1K J 2B		
R104		*	92540214	RD 100K J 2B		
R105		*	92540507	RD 560 J 2B		
R106		*	92501021	CHIP R 330 J 2B		
R107		*	92570418	RN 100K J 1J		
R108		*	92550173	RD 220 J 2B		
R109		*	92570394	RN 1K J 1J		
R110		*	92540531	RD 56K J 2B		
R111		*	92550171	RD 150 J 2B		
R112		*	92550180	RD 820 J 2B		
R113,114		*	92501034	CHIP R 3.9K J 2B		
R115,116		*	92501036	CHIP R 5.6K J 2B		
R117		*	92540533	RD 82K J 2B		

E: Scandinavia & Europe H: Audio Club K: USA P: Canada
 S: South Africa T: England U: PX(Far East, Hawaii)
 [UE]: AAFES(Europe) X: Australia M: Other Areas

PARTS LIST

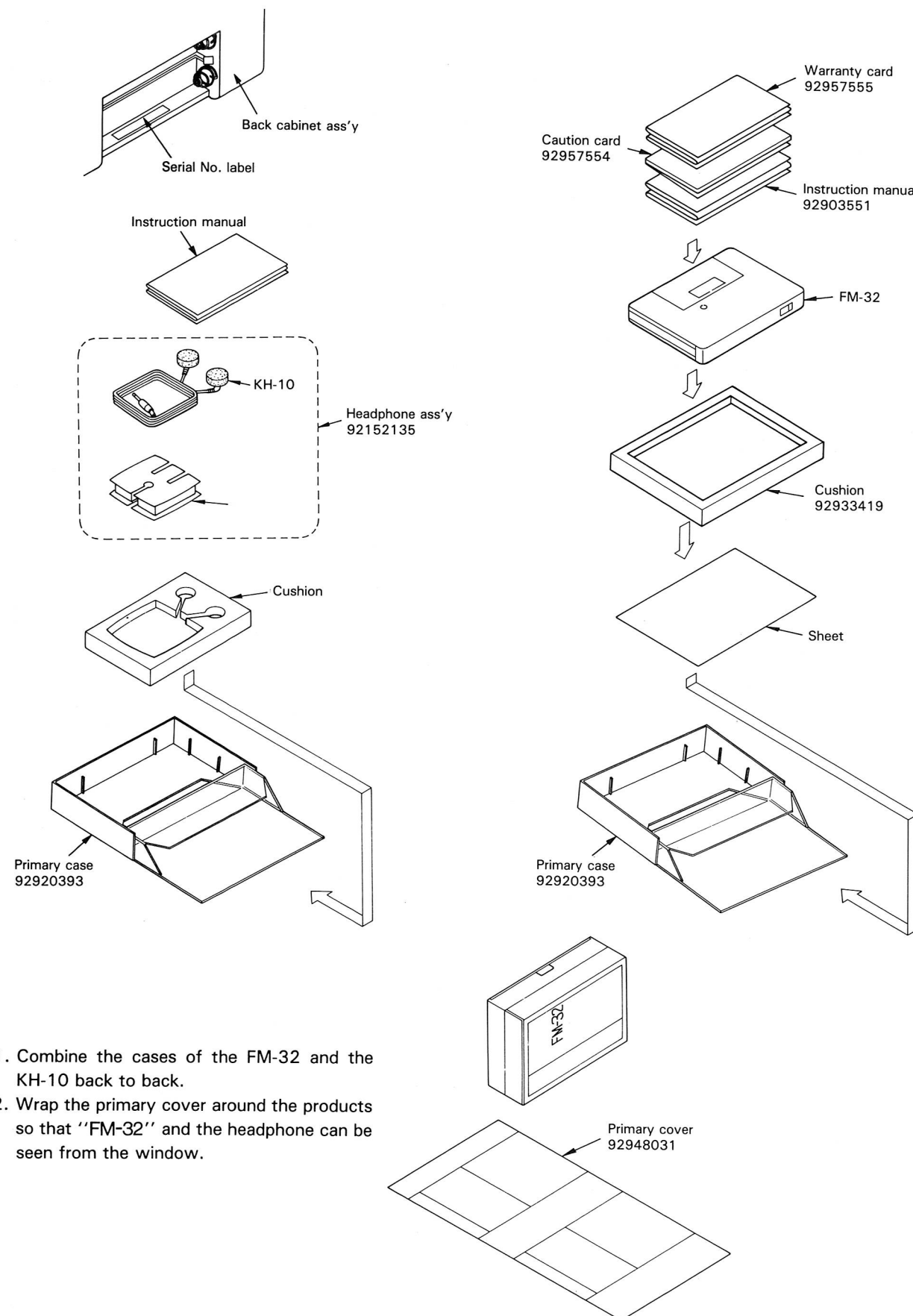
* New Parts

Parts without **Parts No.** are not supplied.
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
 Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
R118		*	92540507	RD 560 J 2B		
R119		*	92540509	RD 820 J 2B		
R120		*	92540501	RD 180 J 2B		
R121		*	92540534	RD 100K J 2B		
R201		*	92658654	TRIMMING POT 10K		
R202		*	92501027	CHIP R 1K J 2B		
R203		*	92540522	RD 10K J 2B		
R204		*	92550166	RD 56 J 2B		
R205		*	92540187	RD 560 J 2B		
R206,207		*	92540504	RD 330 J 2B		
R208		*	92540214	RD 100K J 2B		
R401		*	92614402	POTENTIOMETER 20K		
R402,403		*	92550223	RD 2.2 J 2B		
S401,402		*	92196078	SLIDE SWITCH (POWER,SELECTOR)		
D001			1S2236	DIODE (VARIABLE CAP.)		
D101		*	KB269	DIODE		
D102,103		*	HP80-L	DIODE (RATIO DETECT)		
D201		*	TLR121	LED (STEREO)		
Q001		*	2SK193(UF)	FET (RF AMP)		
Q002,003		*	2SC2668(Ø)	TRANSISTOR		
Q101,102		*	2SC2668(Ø)	TRANSISTOR		
Q103		*	2SC2669(Ø)	TRANSISTOR		
Q104		*	2SC2668(Ø)	TRANSISTOR		
Q105		*	2SC2669(Ø)	TRANSISTOR		
Q201		*	TA7342F	IC		
Q401		*	TA7688F	IC		

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PACKING PROCEDURE



1. Combine the cases of the FM-32 and the KH-10 back to back.
2. Wrap the primary cover around the products so that "FM-32" and the headphone can be seen from the window.

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