

Service Manual

Telephone Equipment

900MHz Cordless Phone

KX-TC914-B

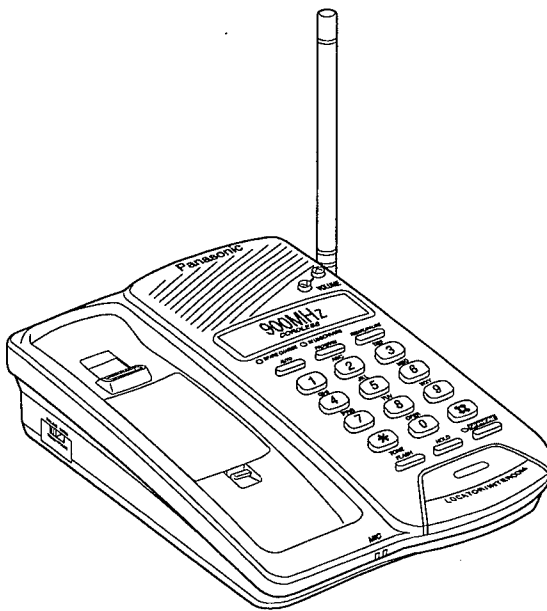
(for U.S.A.)

Please file and use this manual together with the Service Manual for Model KX-TC910-B order No. KM49606062C1.
This Service Manual indicates the main differences between: Original KX-TC910-B and KX-TC914-B.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

The model KX-TC914-B has been changed the RF unit of base unit and P.C.Board of portable handset from model KX-TC910-B.



(Base Unit)

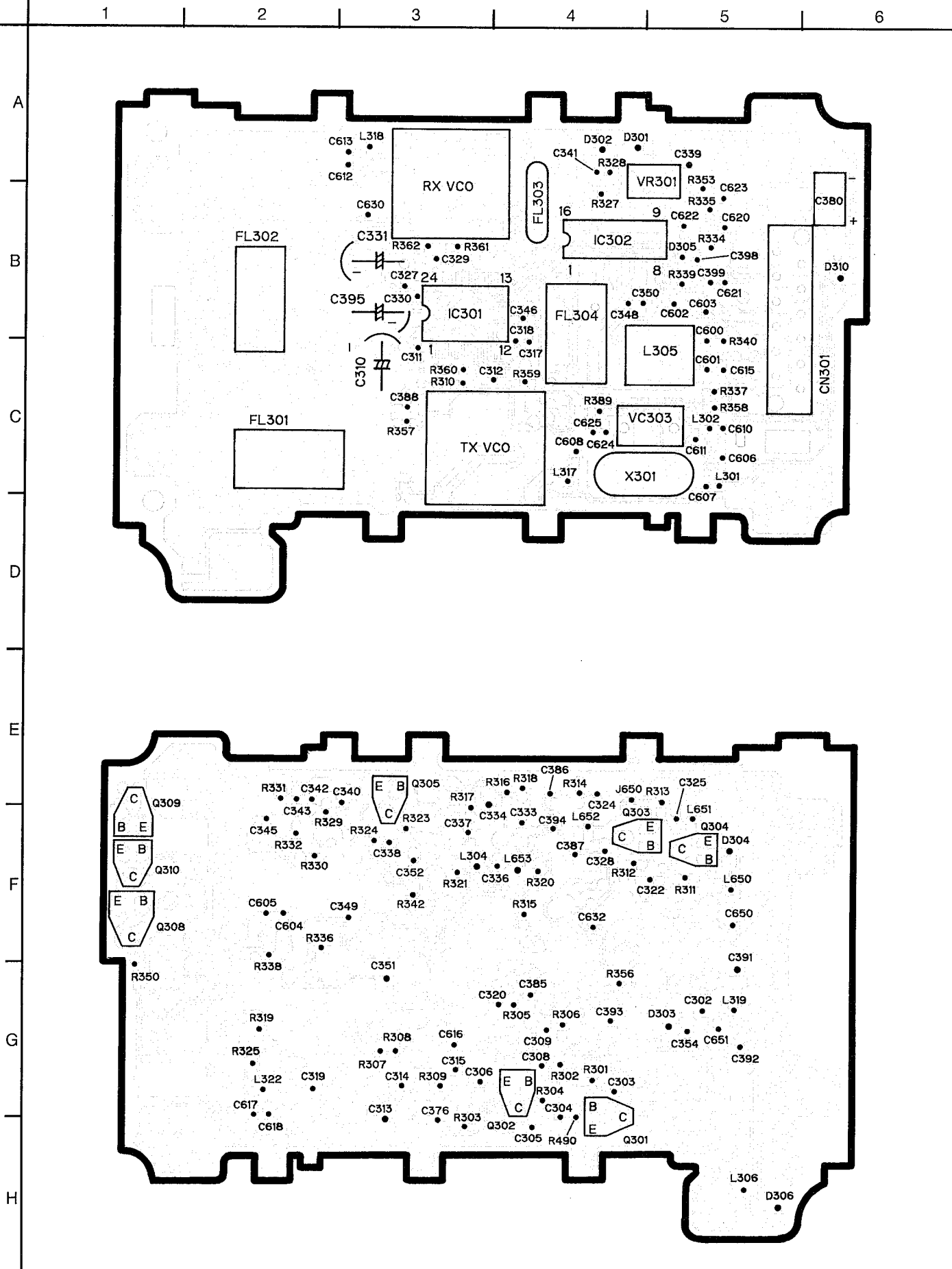


(Portable Handset)

Panasonic

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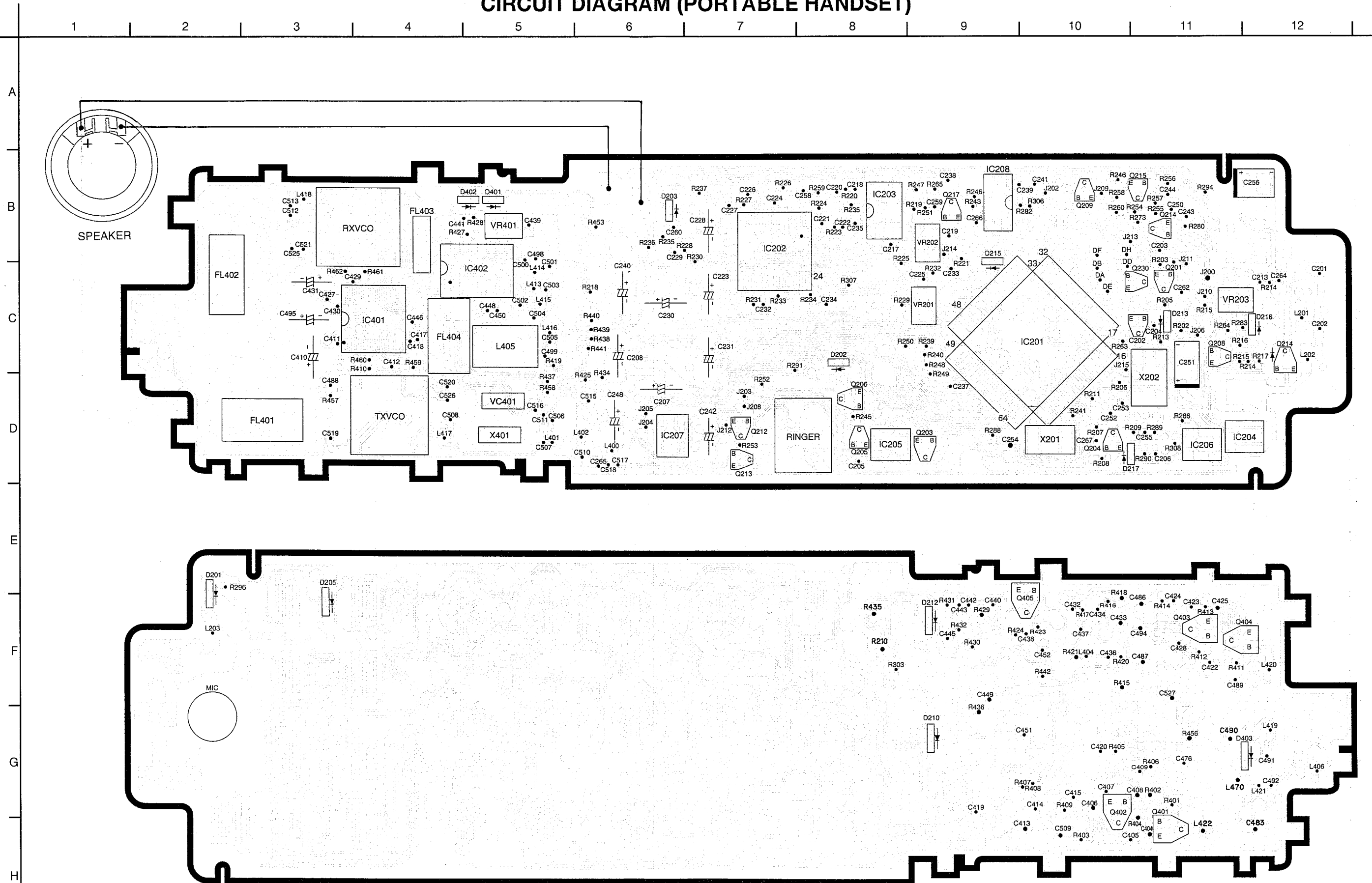
CIRCUIT BOARD (BASE UNIT) [RF UNIT]



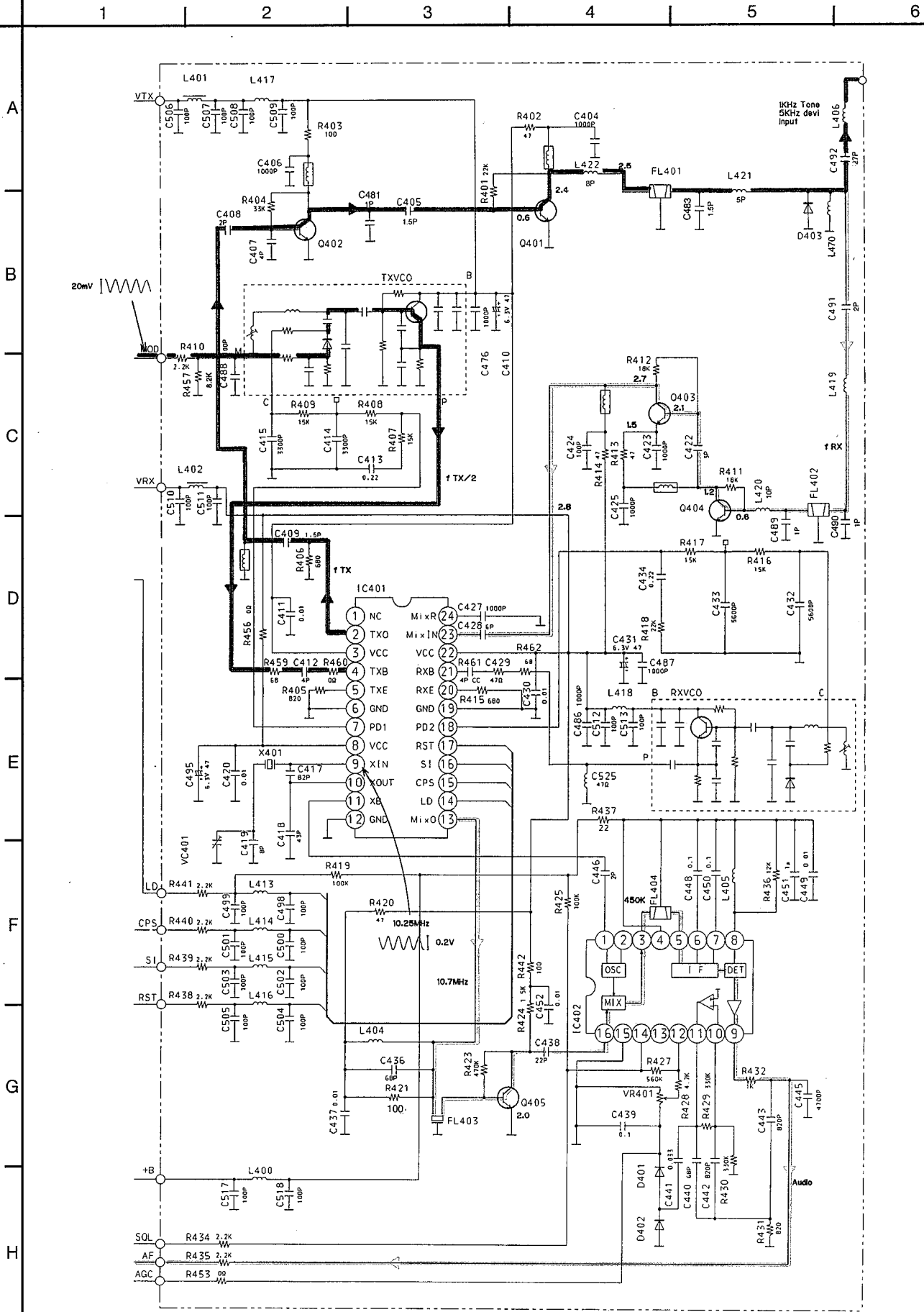
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CIRCUIT DIAGRAM (PORTABLE HANDSET)



SCHEMATIC DIAGRAM (PORTABLE HANDSET)



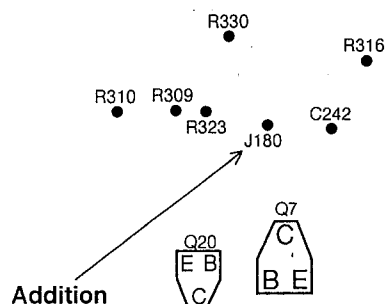
KX-TC914-B

■ PARTS COMPARISON TABLE (Change from original pages 56~65)

Ref. No.	Part No.		Part Names & Descriptions	Pcs/ Set	Remarks
	KX-TC910-B	KX-TC914-B			
Base Unit					
2	PQYF10095Z1	PQYF10101Q1	Lower Cabinet	1	
23	-----	PQGT12871Z	Name Plate (for Lower Cabinet)	1	Addition
PCB1	PQWP1TC910BH	PQWPTC914BH	P.C.Board Ass'y (RTL)	1	
IC1	PQVI25084H83	PQVI25084H88	IC	1	
D12	1SS120	-----	Diode (Si)	0	Deletion
D303	MA4180	MA4200	Diode (Si)	1	
J180	-----	ERJ3GEY0R00	Resistor, 0Ω	1	Addition
Portable Handset					
101	PQYM10060Z1	PQYM10063K1	Front Cabinet	1	
108	PQSX10045Z	PQSX10045V	Key Board Switch	1	
116	-----	PQGT12872Z	Name Plate (for Front Cabinet)	1	Addition
PCB1	PQWPTC910BR	PQWPTC914BR	P.C.Board Ass'y (RTL)	1	
IC201	MN151233KZAB	MN151233KZAD	IC	1	
D206~209	PQVDPY1112H	-----	LED	0	Deletion
L406	MQLRE2N7DF	MQLRE1N2DF	Coil	1	
L419	MQLRE6N8JF	MQLRE12N9JF	Coil	1	
L420	MQLRE10N9JF	ECUV1H100DCV	Capacitor, 10PF	1	
L421	MQLRE15N9JF	ECUV1H050CCV	Capacitor, 5PF	1	
L422	MQLRW6N8JF	ECUV1H080DCV	Capacitor, 8PF	1	
L470	-----	MQLRE3N9JF	Coil	1	Addition
FL401	PQVSM927C11L	PQVSM927F11L	Saw Filter	1	
FL402	PQVS705CF903	PQVSM903F11L	Saw Filter	1	
R253	ERJ3GEYJ221	ERJ3GEYJ181	Resistor, 180Ω	1	
R297~300	ERJ3GEYJ331	-----	Resistor, 330Ω	0	Deletion
R264	ERJ3GEYJ101	ERJ3GEYJ100	Resistor, 10Ω	1	
R457	ERJ3GEYJ562	ERJ3GEYJ822	Resistor, 8.2KΩ	1	
C402, 482	ECUV1H0R5CCV	-----	Capacitor, 0.5PF	0	Deletion
C405	ECUV1H020CCV	ECUV1H1R5CCV	Capacitor, 1.5PF	1	
C483	-----	ECUV1H1R5CCV	Capacitor, 1.5PF	1	Addition
C490	-----	ECUV1H010CCV	Capacitor, 1PF	1	Addition
C491	ECUV1H030CCV	ECUV1H020CCV	Capacitor, 2PF	1	
C492	ECUV1H102KBV	ECUV1H270JCV	Capacitor, 27PF	1	
Accessories and Packing Materials					
A7	PQQW11640Z	PQQW1829Z	Quick Reference Guide	1	
A8	PQQX11617Z	PQQX11801Z	Instruction Book	1	
P6	PQPK12117Z	PQPK12360Z	Gift Box	1	

Note: The RF unit list for base unit: Refer to pages 9,10 in this manual.

■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (Change from original page 24)



(Model KX-TC914-B)

REPLACEMENT PARTS LIST

BASE UNIT (RF UNIT)

Note:

1. RTL (Retention Time Limited)

The marking (RTL) indicates that the Retention Time is limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention.

After the end of this period, the assembly will no longer be available.

2. Important safety notice.

Components identified by a Δ mark special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

3. The S mark indicates service standard parts and may differ from production parts.

4. RESISTORS & CAPACITORS

Unless otherwise specified.

All resistors are in ohms (Ω) K=1000 Ω , M=1000K Ω All capacitors are in MICRO FARADS (μ F) P= μ F

*Type & Wattage of Resistor

Type

ERC:Solid	ERX:Metal Film	PQ4R:Carbon
ERD:Carbon	ERG:Metal Oxide	ERS:Fusible Resistor
PQRD:Carbon	ER0:Metal Film	ERF:Cement Resistor

Wattage

10,16:1/8W	14,25:1/4W	12:1/2W	1:1W	2:2W	3:3W
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*Type & Voltage of Capacitor

Type

ECFD:Semi-Conductor	ECQD,ECKD,ECBT,PQCBC : Ceramic
ECQS:Styrol	ECQE,ECQV,ECQG : Polyester
PQCUV:Chip	ECEA,ECSZ : Electrolytic
ECQMS:Mica	ECQP : Polypropylene

Voltage

ECQ Type	ECQG ECQV Type	ECSZ Type	Others		
1H: 50V	05: 50V	0F:3.15V	0J :6.3V	1V :35V	
2A:100V	1:100V	1A:10V	1A :10V	50,1H:50V	
2E:250V	2:200V	1V:35V	1C :16V	1J :63V	
2H:500V		0J:6.3V	1E,25:25V	2A :100V	

Ref. No.	Part No.	Part Name & Description	Pcs/Set
RF UNIT PARTS			
PCB3	PQLP10197M	P.C.BOARD ASS'Y (RTL)	1
		(ICS)	
IC301	PQVIM64084AG	IC	1
IC302	PQVIDBL5018V	IC	1
		(TRANSISTORS)	
Q301	2SC4571R77	TRANSISTOR(SI)	S 1
Q302	2SC4571R77	TRANSISTOR(SI)	S 1
Q303	2SC4226R24	TRANSISTOR(SI)	1
Q304	2SC4226R24	TRANSISTOR(SI)	1
Q305	2SC4099NT106	TRANSISTOR(SI)	1
Q308	2SD601A	TRANSISTOR(SI)	1
Q309	PQVTD123J106	TRANSISTOR(SI)	1
Q310	PQVTD123J106	TRANSISTOR(SI)	1
		(DIODES)	
D301	PQVDRB751V4	DIODE(SI)	1
D302	PQVDRB751V4	DIODE(SI)	1
D303	MA110	DIODE(SI)	1
D304	MA110	DIODE(SI)	1
D305	MA2S111	DIODE(SI)	1
D306	MA110	DIODE(SI)	1

Ref. No.	Part No.	Part Name & Description	Pcs/Set
D310	MA8047	DIODE(SI)	1
C391	MA110	DIODE(SI)	1
		(COILS)	
L302	PQLQR1RM601	COIL	1
L304	PQLQR2N3R3KT	COIL	1
L305	PQLI2B201	COIL	1
L306	MQLRE10NJF	COIL	1
L319	MQLRE12NJF	COIL	1
L322	PQLQR1RM601	COIL	1
L650	MQLRE6N8JF	COIL	1
L651	MQLRE6N8JF	COIL	1
L652	MQLRE12nJF	COIL	1
L653	PQLQR2N3R3K	COIL	1
R389	PQLQR1RM601	COIL	1
C302	MQLRE5N6JF	COIL	1
		(SAW FILTERS)	
FL301	PQVSM903F11L	SAW FILTER	1
FL302	PQVSM927F11L	SAW FILTER	1
FL303	PQVFSFE107MJ	SAW FILTER	S 1
FL304	PQVFCFH450B1	SAW FILTER	1
		(OTHERS)	
RX VCO	PQV030Z	CRYSTAL OSCILLATOR	1
TX VCO	PQV031Z	CRYSTAL OSCILLATOR	1
VC301	ECRLA010A53R	TRIMMER CAPACITOR	1
VR301	EVN5ESX50B54	VARIABLE RESISTOR	1
X301	PQVCJ1025N0Z	CRYSTAL OSCILLATOR	1
CN301	PQJS12A99Z	CONNECTOR	1
		(RESISTORS)	
R301	ERJ3GEYJ333	33K	1
R302	ERJ3GEYJ470	47	1
R303	ERJ3GEYJ101	100	1
R304	ERJ3GEYJ333	33K	1
R305	ERJ3GEYJ821	820	1
R306	ERJ3GEYJ681	680	1
R307	ERJ3GEYJ223	22K	1
R308	ERJ3GEYJ153	15K	1
R309	ERJ3GEYJ153	15K	1
R310	ERJ3GEYJ222	2.2K	1
R311	ERJ3GEYJ333	33K	1
R312	ERJ3GEYJ333	33K	1
R313	ERJ3GEYJ470	47	1
R314	ERJ3GEYJ470	47	1
R315	ERJ3GEYJ681	680	1
R316	ERJ3GEYJ153	15K	1
R317	ERJ3GEYJ153	15K	1
R318	ERJ3GEYJ223	22K	1
R319	ERJ3GEYJ474	470K	1
R320	ERJ3GEYJ470	47	1
R321	ERJ3GEYJ221	220	1
R323	ERJ3GEYJ104	100K	1
R324	ERJ3GEYJ102	1K	1
R325	ERJ3GEYJ104	100K	1
R327	ERJ3GEYJ824	820K	1
R328	ERJ3GEYJ472	4.7K	1
R329	ERJ3GEYJ334	330K	1
R330	ERJ3GEYJ154	150K	1
R331	ERJ3GEYJ821	820	1
R332	ERJ3GEYJ102	1K	1
R334	ERJ3GEYJ222	2.2K	1
R335	ERJ3GEYJ222	2.2K	1
R336	ERJ3GEYJ103	10K	1
R337	ERJ3GEYJ220	22	1
R338	ERJ3GEYJ222	2.2K	1

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Ref. No.	Part No.	Part Name & Description	Pcs/Set
R339	ERJ3GEYJ222	2.2K	1
R340	ERJ3GEYJ222	2.2K	1
R342	ERJ3GEYJ101	100	1
R350	ERJ3GEYJ821	820	1
R353	ERJ3GEYJ222	2.2K	1
R356	ERJ3GEY0R00	0	1
R357	ERJ3GEYJ392	3.9K	1
R358	ERJ3GEYJ222	2.2K	1
R359	ERJ3GEYJ680	68	1
R360	ECUV1H040CCV	4P	1
R361	ERJ3GEY0R00	0	1
R362	ERJ3GEYJ680	68	1
R490	ERJ3GEYJ150	15	1
L317	ERJ3GEYJ270	27	1
L318	ERJ3GEYJ270	27	1
C312	ERJ3GEYJ470	47	1
C394	ERJ3GEY0R00	0	1
C630	ERJ3GEYJ470	47	1
C632	ERJ3GEY0R00	0	1
J650	ERJ3GEY0R00	0	1
(CAPACITORS)			
C303	ECUV1H040CCV	4P	1
C304	ECUV1H102KBV	0.001	1
C305	ECUV1H020CCV	2P	1
C306	ECUV1H102KBV	0.001	1
C308	ECUV1H030CCV	3P	1
C309	ECUV1H030CCV	3P	1
C310	ECEA1CKS470	47	1
C311	ECUV1H102KBV	0.001	1
C313	PQCUV1C224KB	0.22	1
C314	ECUV1H682KBV	0.0068	1
C315	ECUV1H332KBV	0.0033	1
C317	ECUV1H820JCV	82P	1
C318	ECUV1H430JCV	43P	1
C319	ECUV1H080DCV	8P	1
C320	ECUV1H103KBV	0.01	1
C322	ECUV1H030CCV	3P	1
C324	ECUV1H102KBV	0.001	1
C325	ECUV1H102KBV	0.001	1
C327	ECUV1H102KBV	0.001	1
C328	ECUV1H060DCV	6P	1
C329	ECUV1H040CCV	4P	1
C330	ECUV1H103KBV	0.01	1
C331	ECEA1CKS470	47	1
C333	ECUV1H223KBV	0.022	1
C334	PQCUV1C224KB	0.22	1
C336	ECUV1H330JCV	33P	1
C337	ECUV1H103KBV	0.01	1
C338	ECUV1H220JCV	22P	1
C339	PQCUV1C224KB	0.22	1
C340	ECUV1H101JCV	100P	1
C341	ECUV1H333KDV	0.033	1
C342	ECUV1H102KBV	0.001	1
C343	ECUV1H102KBV	0.001	1
C345	ECUV1H472KBV	0.0047	1
C346	ECUV1H020CCV	2P	1
C348	ECUV1H103KBV	0.01	1
C349	ECUV1H103KBV	0.01	1
C350	ECUV1H103KBV	0.01	1
C351	PQCUV1C105ZF	1	1
C352	ECUV1H103KBV	0.01	1
C354	ECUV1H040CCV	4P	1
C376	ECUV1H102KBV	0.001	1
C380	ECST0JX226	22	1
C383	ECUV1H020CCV	2P	1
C385	ECUV1H101JCV	100P	1
C386	ECUV1H102KBV	0.001	1
C387	ECUV1H102KBV	0.001	1
C388	ECUV1H101JCV	100P	1

Ref. No.	Part No.	Value	Pcs/Set
C392	ECUV1H120JCV	12P	1
C393	ECUV1H103KBV	0.01	1
C395	ECEA1CKS100	10	1
C398	ECUV1H101JCV	100P	1
C399	ECUV1A105ZVF	1	1
C600	ECUV1H101JCV	100P	1
C601	ECUV1H101JCV	100P	1
C602	ECUV1H101JCV	100P	1
C603	ECUV1H101JCV	100P	1
C604	ECUV1H101JCV	100P	1
C605	ECUV1H101JCV	100P	1
C606	ECUV1H101JCV	100P	1
C607	ECUV1H101JCV	100P	1
C608	ECUV1H101JCV	100P	1
C610	ECUV1H101JCV	100P	1
C611	ECUV1H101JCV	100P	1
C612	ECUV1H101JCV	100P	1
C613	ECUV1H101JCV	100P	1
C615	ECUV1H101JCV	100P	1
C616	ECUV1H101JCV	100P	1
C617	ECUV1H101JCV	100P	1
C618	ECUV1H101JCV	100P	1
C620	ECUV1H101JCV	100P	1
C621	ECUV1H101JCV	100P	1
C622	ECUV1H101JCV	100P	1
C623	ECUV1H101JCV	100P	1
C624	ECUV1H101JCV	100P	1
C625	ECUV1H101JCV	100P	1
C650	ECUV1H030CCV	3P	1
C651	ECUV1H1R5CCV	1.5P	1