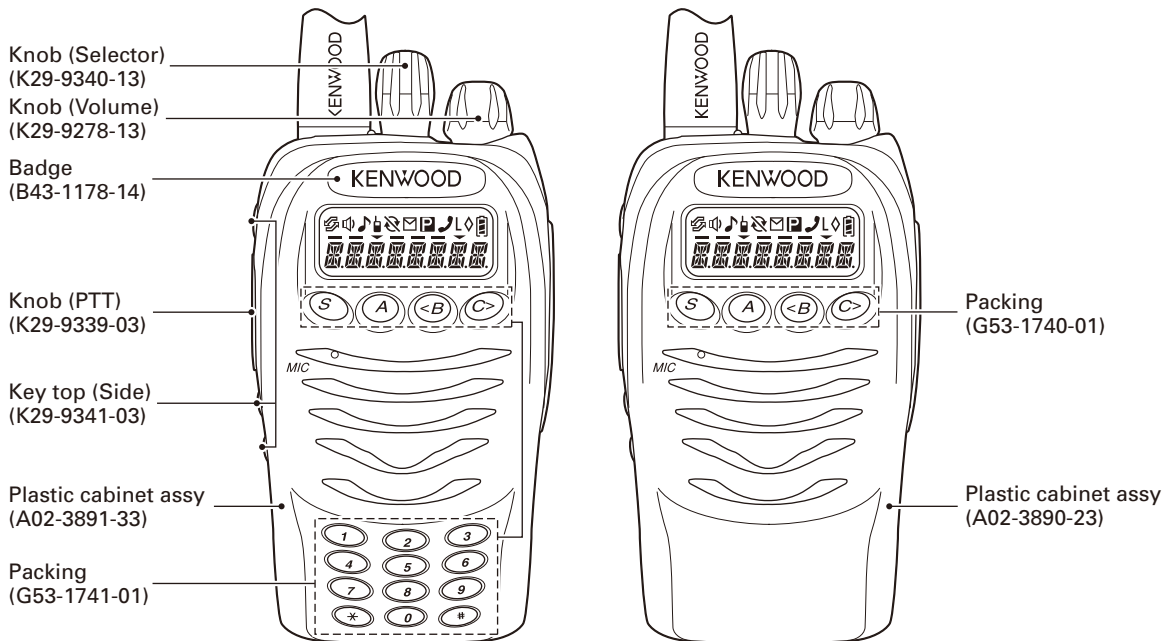


TK-3170 E,E3,E7

TK-3170 E4,E6



Does not come with antenna.
Antenna is available as an option.

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TK-3170

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Disclaimer

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GENERAL

INTRODUCTION

SCOPE OF THIS MANUAL

This manual is intended for use by experienced technicians familiar with similar types of commercial grade communications equipment. It contains all required service information for the equipment and is current as of the publication date. Changes which may occur after publication are covered by either Service Bulletins or Manual Revisions. These are issued as required.

ORDERING REPLACEMENT PARTS

When ordering replacement parts or equipment information, the full part identification number should be included. This applies to all parts : components, kits, or chassis. If the part number is not known, include the chassis or kit number of which it is a part, and a sufficient description of the required component for proper identification.

PERSONAL SAFETY

The following precautions are recommended for personnel safety:

- DO NOT transmit until all RF connectors are verified secure and any open connectors are properly terminated.
- SHUT OFF and DO NOT operate this equipment near electrical blasting caps or in an explosive atmosphere.
- This equipment should be serviced by a qualified technician only.

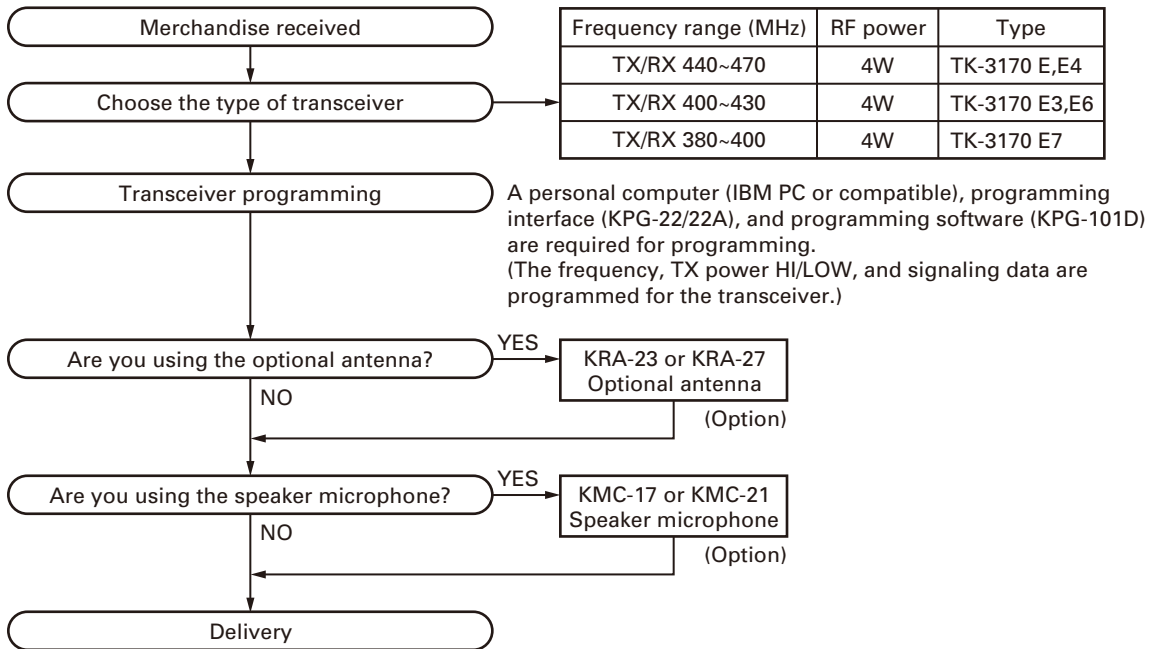
SERVICE

This radio is designed for easy servicing. Refer to the schematic diagrams, printed circuit board views, and alignment procedures contained within.

SERVICE MANUAL LIST

Title	Part number	Remarks	Market code	TX-RX unit number
TK-3170	B51-8738-00		E,X2	X57-701X-XX J72-0964-19
TK-3170 SUPPLEMENT	B51-8740-00		E3	X57-7012-72 J72-0964-19
TK-3170 SUPPLEMENT II	B51-8765-00		E,E3,E4,E6	X57-7012-XX J79-0084-09
TK-3170 SUPPLEMENT III	B51-8835-00	This service manual	E,E3,E4,E6,E7	X57-7012-XX J79-0084-09

SYSTEM SET-UP



PARTS LIST

* New Parts. Δ indicates safety critical components.

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.

L : Scandinavia

Y : PX (Far East, Hawaii)

Y : AAFES (Europe)

K : USA

T : England

X : Australia

P : Canada

E : Europe

M : Other Areas

TK-3170 (Y50-5862-XX)

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
TK-3170					
1	1A		A02-3890-23	PLASTIC CABINET ASSY (4KEYS)	E4,E6
2	1B		A02-3891-33	PLASTIC CABINET ASSY (16KEYS)	E,E3,E7
4	3A		B01-0694-03	ESCUTCHEON	
5	2D		B09-0686-03	CAP ACCESSORY	
6	2B		B11-1826-03	ILLUMINATION GUIDE (LCD)	
7	2A		B11-1827-04	ILLUMINATION GUIDE (TX-RX)	
8	2B		B11-1828-04	FILTER (LCD)	
9	2B		B38-0901-05	LCD	
10	1A,1B		B43-1178-14	BADGE	
11	3C	*	B62-1812-20	INSTRUCTION MANUAL	
13	2A		E04-0467-05	RF COAXIAL RECEPTACLE (SMA)	
14	2A		E23-1188-04	TERMINAL (ANT)	
15	3A		E23-1189-14	TERMINAL (GND)	
16	2B		E29-1204-04	INTER CONNECTOR (LCD)	
17	2B		E29-1211-04	INTER CONNECTOR (4KEYS PCB)	
18	3A		E72-0421-03	TERMINAL BLOCK	
20	3A		F07-1890-04	COVER (OP BOARD)	
22	1A,1B		G10-1304-04	FIBROUS SHEET (CABINET)	
23	1A		G10-1324-04	FIBROUS SHEET (4KEYS CABINET)	E4,E6
-			G10-1333-04	FIBROUS SHEET (CABINET-SP)	
25	2A		G10-1365-04	FIBROUS SHEET (CN901)	E,E4
-		*	G11-4248-04	SHEET (PTT KNOB)	
27	3A		G11-4315-14	SHEET (CHASSIS)	
28	2A		G11-4316-04	SHEET (PTT)	
29	2B		G11-4335-14	SHEET (LCD)	
30	1A,1B		G11-4351-04	SHEET (CABINET)	
31	2A		G13-1885-04	CUSHION (CHASSIS,ANT)	
32	3A		G13-2001-04	CUSHION (OP BOARD)	
33	2A		G53-1603-04	PACKING (ANT)	
34	2B		G53-1650-12	PACKING (TOP)	
35	2B		G53-1653-03	PACKING (JACK)	
36	3A		G53-1654-04	PACKING (TERMINAL)	
37	3A		G53-1655-04	PACKING (OP BOARD)	
38	1A	*	G53-1740-01	PACKING (4KEYS)	E4,E6
39	1B	*	G53-1741-01	PACKING (16KEYS)	E,E3,E7
41	2C		H12-4210-02	PACKING FIXTURE	
42	1D		H52-2067-02	ITEM CARTON CASE	
44	2B		J19-5481-03	HOLDER (SP)	
45	2D		J19-5483-23	HOLDER ACCESSORY	
46	1B		J21-8488-03	MOUNTING HARDWARE (LCD)	
47	2C		J29-0701-15	HOOK ACCESSORY	
48	3A		J82-0106-05	FPC (VOL/SELECTOR)	
49	2A		J82-0111-05	FPC (PTT)	
50	2A		J99-0399-04	DOUBLE-SIDED TAPE (4x7mm)	
52	1B		K29-9278-13	KNOB (VOLUME)	
53	1B		K29-9339-03	KNOB (PTT)	
54	1B		K29-9340-13	KNOB (SELECTOR)	
55	1B		K29-9341-03	KEY TOP (SIDE)	
A	2A,3A		N09-2438-05	BINDING HEAD SCREW	
B	3A	*	N09-6571-05	PAN HEAD SCREW	

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C	3B		N14-0805-04	CIRCULAR NUT	
D	2A		N14-0833-04	CIRCULAR NUT	
E	3A		N30-3006-43	PAN HEAD MACHINE SCREW	
F	3A		N79-2030-48	PAN HEAD TAPTITE SCREW	
G	2A,2B		N83-2005-48	PAN HEAD TAPTITE SCREW	
57	3A		R31-0665-05	VARIABLE RESISTOR	
59	1B		T07-0369-15	SPEAKER	
60	2B		T91-0650-05	MIC ELEMENT	
62	2A		W02-3711-05	SELECTOR	
TX-RX UNIT (X57-7012-XX) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7					
D2			B30-2278-05	LED (RED/YELLOW)	
D5			B30-2210-05	LED (TLY)	
D7			B30-2210-05	LED (TLY)	
D8,9			B30-2050-05	LED	E,E3,E7
D12,13			B30-2050-05	LED	E,E3,E7
C2			CK73HB1H471K	CHIP C 470PF	K
C3			CK73FB1A475K	CHIP C 4.7UF	K
C4			CK73GB1E105K	CHIP C 1.0UF	K
C5,6			CK73HB1H471K	CHIP C 470PF	K
C7			CK73HB1A104K	CHIP C 0.10UF	K
C9			CK73GB1E105K	CHIP C 1.0UF	K
C11			CK73FB1A225K	CHIP C 2.2UF	K
C13			CK73HB1H471K	CHIP C 470PF	K
C14,15			CK73HB1E472K	CHIP C 4700PF	K
C16,17			CK73HB1H471K	CHIP C 470PF	K
C18			CK73HB1A104K	CHIP C 0.10UF	K
C19			CK73HB1H471K	CHIP C 470PF	K
C20			CK73HB1E472K	CHIP C 4700PF	K
C21			CK73HB1H471K	CHIP C 470PF	K
C22			CK73HB1E472K	CHIP C 4700PF	K
C23,24			CK73GB1E105K	CHIP C 1.0UF	K
C25			CK73HB1E472K	CHIP C 4700PF	K
C26			CK73HB1H471K	CHIP C 470PF	K
C27			CS77AA0J220M	CHIP TNTL 22UF 6.3WV	
C28-31			CK73HB1H471K	CHIP C 470PF	K
C32,33			CK73HB1A104K	CHIP C 0.10UF	K
C34			CK73HB1H471K	CHIP C 470PF	K
C35			CK73HB1A104K	CHIP C 0.10UF	K
C38,39			CK73HB1A473K	CHIP C 0.047UF	K
C40			CK73HB1H471K	CHIP C 470PF	K
C42			CK73HB1H681K	CHIP C 680PF	K
C43,44			CK73HB1C103K	CHIP C 0.010UF	K
C45			CS77AA0J220M	CHIP TNTL 22UF 6.3WV	
C46			CK73HB1H471K	CHIP C 470PF	K
C47			CK73GB1E105K	CHIP C 1.0UF	K
C48-51			CK73HB1H471K	CHIP C 470PF	K
C52			CK73HB1A104K	CHIP C 0.10UF	K
C53			CK73HB1H471K	CHIP C 470PF	K
C55			CK73GB1E105K	CHIP C 1.0UF	K
C56			CK73HB1A104K	CHIP C 0.10UF	K
C57			CS77AA0J150M	CHIP TNTL 15UF 6.3WV	

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C58			CK73HB1H471K	CHIP C 470PF K		C133			CK73GB0J475K	CHIP C 4.7UF K	
C59			CC73HCH1H220J	CHIP C 22PF J		C134			CK73HB1A473K	CHIP C 0.047UF K	
C60			CC73HCH1H120J	CHIP C 12PF J		C135			CK73GB1E105K	CHIP C 1.0UF K	
C61			CK73HB1A104K	CHIP C 0.10UF K		C136			CK73HB1H561K	CHIP C 560PF K	
C62			CC73HCH1H010C	CHIP C 1.0PF C		C137			CK73HB1H471K	CHIP C 470PF K	
C63			CC73HCH1H120J	CHIP C 12PF J		C138			CK73HB1A104K	CHIP C 0.10UF K	
C65			CK73HB1A104K	CHIP C 0.10UF K		C140			CK73HB1A104K	CHIP C 0.10UF K	
C66			CK73HB1C103K	CHIP C 0.010UF K		C142,143			CK73GB1E105K	CHIP C 1.0UF K	
C67			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV		C145-148			CK73HB1H471K	CHIP C 470PF K	
C68			CK73HB1H471K	CHIP C 470PF K		C149			CK73HB1H221K	CHIP C 220PF K	
C69			CS77AA0J100M	CHIP TNTL 10UF 6.3WV		C150,151			CK73FB1A225K	CHIP C 2.2UF K	
C70			CK73HB1E682K	CHIP C 6800PF K		C153			CK73GB1E105K	CHIP C 1.0UF K	
C71			CK73HB1H392K	CHIP C 3900PF K		C154,155			CK73HB1H471K	CHIP C 470PF K	
C72			CK73HB1H122K	CHIP C 1200PF K		C157			CK73GB1A224K	CHIP C 0.22UF K	
C73			CC73HCH1H470J	CHIP C 47PF J		C158			CK73HB1A104K	CHIP C 0.10UF K	
C74			CK73HB1H122K	CHIP C 1200PF K		C159			CC73HCH1H101J	CHIP C 100PF J	
C75			CK73HB1C153K	CHIP C 0.015UF K		C161			CC73HCH1H101J	CHIP C 100PF J	
C76			CK73HB1H332K	CHIP C 3300PF K		C162			CS77AA0J100M	CHIP TNTL 10UF 6.3WV	
C77			CK73HB1C153K	CHIP C 0.015UF K		C166			CK73HB1H471K	CHIP C 470PF K	
C78			CK73HB1H221K	CHIP C 220PF K		C168,169			CK73HB1A393K	CHIP C 0.039UF K	
C79			CK73HB1H222K	CHIP C 2200PF K		C170			CK73HB1H471K	CHIP C 470PF K	
C81			CK73HB1A104K	CHIP C 0.10UF K		C171			CS77AA0J100M	CHIP TNTL 10UF 6.3WV	
C82			CC73HCH1H101J	CHIP C 100PF J		C172			CS77CC0J101M	CHIP TNTL 100UF 6.3WV	
C84			CK73HB1H471K	CHIP C 470PF K		C173			CK73HB1H221K	CHIP C 220PF K	
C85			CK73HB1C123K	CHIP C 0.012UF K		C174			CK73HB1H471K	CHIP C 470PF K	
C87			CK73HB1A104K	CHIP C 0.10UF K		C175			CK73HB1C103K	CHIP C 0.010UF K	
C88,89			CC73HCH1H010B	CHIP C 1.0PF B		C176			CK73HB1A224K	CHIP C 0.22UF K	
C90,91			CK73GB1E104K	CHIP C 0.10UF K		C177			CK73HB1A104K	CHIP C 0.10UF K	
C93			CK73GB1E105K	CHIP C 1.0UF K		C178			CK73GB1E105K	CHIP C 1.0UF K	
C95			CK73HB1A224K	CHIP C 0.22UF K		C181			CK73GB0J475K	CHIP C 4.7UF K	
C96			CK73GB1E105K	CHIP C 1.0UF K		C182			CK73HB1H681K	CHIP C 680PF K	
C97			CC73HCH1H151J	CHIP C 150PF J		C183			CK73HB1H471K	CHIP C 470PF K	
C98			CK73HB1A683K	CHIP C 0.068UF K		C184			CK73HB1H222K	CHIP C 2200PF K	
C99,100			CK73FB1A475K	CHIP C 4.7UF K		C185			CK73HB1C103K	CHIP C 0.010UF K	
C102			CK73HB1C103K	CHIP C 0.010UF K		C186			CC73HCH1H270J	CHIP C 27PF J	
C104			CK73GB1E104K	CHIP C 0.10UF K		C187			CK73HB1C103K	CHIP C 0.010UF K	
C106			CK73HB1H471K	CHIP C 470PF K		C188			CC73HCH1H270J	CHIP C 27PF J	
C107			CK73HB1A104K	CHIP C 0.10UF K		C189			CK73GB1E104K	CHIP C 0.10UF K	
C108			CK73GB1E105K	CHIP C 1.0UF K		C190,191			CK73HB1H471K	CHIP C 470PF K	
C109			CC73HCH1H100D	CHIP C 10PF D		C192			CK73HB1H102K	CHIP C 1000PF K	
C110			CK73HB1H471K	CHIP C 470PF K		C196			CK73HB1C473K	CHIP C 0.047UF K	
C111			CK73HB1C103K	CHIP C 0.010UF K		C197,198			CK73HB1H471K	CHIP C 470PF K	
C112			CC73HCH1H680J	CHIP C 68PF J		C199,200			CK73HB1A104K	CHIP C 0.10UF K	
C113-115			CK73HB1A104K	CHIP C 0.10UF K		C200			CK73HB1A104K	CHIP C 0.10UF K	
C116			CC73HCH1H220J	CHIP C 22PF J		C201			CK73HB1A224K	CHIP C 0.22UF K	
C117			CK73GB1E105K	CHIP C 1.0UF K		C202			CK73GB1E105K	CHIP C 1.0UF K	
C118			CK73HB1A104K	CHIP C 0.10UF K		C423			CK73FB1A475K	CHIP C 4.7UF K	
C119			CK73HB1C103K	CHIP C 0.010UF K		C501			CK73HB1C103K	CHIP C 0.010UF K	
C120			CK73GB1C225K	CHIP C 2.2UF K		C502			CC73HCH1H470J	CHIP C 47PF J	
C121			CK73HB1A393K	CHIP C 0.039UF K		C503			CC73HCH1H101J	CHIP C 100PF J	
C122			CK73HB1H471K	CHIP C 470PF K		C505			CC73HCH1H101J	CHIP C 100PF J	
C123			CC73HCH1H680J	CHIP C 68PF J		C506			CK73HB1C103K	CHIP C 0.010UF K	
C125			CK73HB1A104K	CHIP C 0.10UF K		C507,508			CC73HCH1H101J	CHIP C 100PF J	
C126			CC73HCH1H470J	CHIP C 47PF J		C509			CC73HCH1H150J	CHIP C 15PF J	
C127			CC73HCH1H181J	CHIP C 180PF J		C512			CK73HB1C103K	CHIP C 0.010UF K	
C128			CK73HB1H471K	CHIP C 470PF K		C513			CK73HB1H471K	CHIP C 470PF K	
C129			CK73GB1E105K	CHIP C 1.0UF K		C514			CC73HCH1H101J	CHIP C 100PF J	
C130			CK73HB1A104K	CHIP C 0.10UF K		C515			CK73HB1H471K	CHIP C 470PF K	
C131			CK73HB1H821K	CHIP C 820PF K		C517			CK73HB1H471K	CHIP C 470PF K	
C132			CK73HB1A104K	CHIP C 0.10UF K		C520			CK73GB1E105K	CHIP C 1.0UF K	
											E,E4 E3,E6,E7

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C522			CC73HCH1H050C	CHIP C 5.0PF C		C601			CK73HB1H471K	CHIP C 470PF K	
C523			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV		C604			CK73HB1A224K	CHIP C 0.22UF K	
C524			CC73HCH1H101J	CHIP C 100PF J		C606			CK73HB1H471K	CHIP C 470PF K	
C525			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	E,E4	C608			CK73HB1H471K	CHIP C 470PF K	
C525			CS77AA1E010M	CHIP TNTL 1.0UF 25WV	E3,E6,E7	C609			CC73HCH1H050C	CHIP C 5.0PF C	
C526			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV		C610-613			CK73HB1H471K	CHIP C 470PF K	E3,E6,E7
C527			CC73HCH1H050C	CHIP C 5.0PF C	E,E4	C611-613			CK73HB1H471K	CHIP C 470PF K	E,E4
C527			CC73HCH1H080D	CHIP C 8.0PF D	E3,E6,E7	C615			CK73HB1H471K	CHIP C 470PF K	
C528			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV	E,E4	C617			CC73HCH1H150J	CHIP C 15PF J	
C528			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV	E3,E6	C619			CC73HCH1H150J	CHIP C 15PF J	E,E4
C529			CC73HCH1H020C	CHIP C 2.0PF C	E3,E6,E7	C622			CC73HCH1H101J	CHIP C 100PF J	
C529			CC73HCH1H030C	CHIP C 3.0PF C	E,E4	C623			CK73HB1H102K	CHIP C 1000PF K	
C530			CC73HCH1H101J	CHIP C 100PF J		C625			CC73HCH1H070D	CHIP C 7.0PF D	E,E4
C533			CC73HCH1H1R5C	CHIP C 1.5PF C		C625			CC73HCH1H120J	CHIP C 12PF J	E3,E6,E7
C536			CC73HCH1H030C	CHIP C 3.0PF C		C626			CC73HCH1H101J	CHIP C 100PF J	
C537			CC73HCH1H050C	CHIP C 5.0PF C		C627			CC73HCH1H270J	CHIP C 27PF J	E3,E6,E7
C538			CC73HCH1H101J	CHIP C 100PF J		C627			CC73HCH1H390J	CHIP C 39PF J	E,E4
C539			CC73HCH1H1R5B	CHIP C 1.5PF B		C629			CC73HCH1H150J	CHIP C 15PF J	E,E4
C540			CC73HCH1H020B	CHIP C 2.0PF B		C629			CC73HCH1H270J	CHIP C 27PF J	E3,E6,E7
C541			CC73HCH1H220J	CHIP C 22PF J		C631			CC73HCH1H180J	CHIP C 18PF J	
C542			CC73HCH1H1R5C	CHIP C 1.5PF C	E,E4	C632			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	
C544			CC73HCH1H1R5C	CHIP C 1.5PF C		C633			CK73HB1H471K	CHIP C 470PF K	
C545			CC73HCH1H090D	CHIP C 9.0PF D	E,E4	C635			CC73HCH1H101J	CHIP C 100PF J	
C545			CC73HCH1H150J	CHIP C 15PF J	E3,E6,E7	C636			CC73HCH1H180J	CHIP C 18PF J	E3,E6,E7
C546			CC73HCH1H1R5C	CHIP C 1.5PF C	E,E4	C636			CC73HCH1H220J	CHIP C 22PF J	E,E4
C548			CC73HCH1H330J	CHIP C 33PF J	E3,E6,E7	C637			CK73HB1H102K	CHIP C 1000PF K	
C548			CC73HCH1H470J	CHIP C 47PF J	E,E4	C638,639			CK73HB1H471K	CHIP C 470PF K	
C549			CC73HCH1H080B	CHIP C 8.0PF B	E,E4	C641			CC73HCH1H101J	CHIP C 100PF J	
C549			CC73HCH1H270J	CHIP C 27PF J	E3,E6,E7	C643			CK73HB1C103K	CHIP C 0.010UF K	
C551			CC73HCH1H0R5B	CHIP C 0.5PF B		C645			CC73GCH1H120J	CHIP C 12PF J	E,E4
C552			CC73HCH1H101J	CHIP C 100PF J		C645			CC73GCH1H150J	CHIP C 15PF J	E3,E6,E7
C553			CC73HCH1H040B	CHIP C 4.0PF B	E7	C646			CK73HB1H471K	CHIP C 470PF K	
C553			CC73HCH1H050B	CHIP C 5.0PF B	E,E4	C648			CK73HB1H471K	CHIP C 470PF K	
C553-555			CC73HCH1H050B	CHIP C 5.0PF B	E3,E6	C651			CK73HB1A104K	CHIP C 0.10UF K	
C554-556			CC73HCH1H040B	CHIP C 4.0PF B	E,E4	C652			CC73GCH1H220J	CHIP C 22PF J	E,E4
C554,555			CC73HCH1H050B	CHIP C 5.0PF B	E7	C655			CC73GCH1H270J	CHIP C 27PF J	E3,E6
C556			CC73HCH1H060B	CHIP C 6.0PF B	E3,E6,E7	C655			CC73GCH1H330J	CHIP C 33PF J	E7
C558			CC73HCH1H050B	CHIP C 5.0PF B	E3,E6,E7	C658			CK73HB1H471K	CHIP C 470PF K	
C558			CC73HCH1H060B	CHIP C 6.0PF B	E,E4	C660			CC73GCH1H150J	CHIP C 15PF J	E3,E6
C559			CC73HCH1H080B	CHIP C 8.0PF B	E3,E6,E7	C660			CC73GCH1H180J	CHIP C 18PF J	E7
C559			CC73HCH1H090B	CHIP C 9.0PF B	E,E4	C660			CC73GCH1H220J	CHIP C 22PF J	E,E4
C560			CC73HCH1H101J	CHIP C 100PF J		C665			CK73HB1A104K	CHIP C 0.10UF K	
C562,563			CK73HB1H471K	CHIP C 470PF K		C669			CC73GCH1H060B	CHIP C 6.0PF B	E,E4
C564,565			CK73HB1A104K	CHIP C 0.10UF K		C669			CC73GCH1H070B	CHIP C 7.0PF B	E7
C566,567			CC73HCH1H0R5B	CHIP C 0.5PF B		C669			CC73GCH1H080B	CHIP C 8.0PF B	E3,E6
C568			CK73HB1C103K	CHIP C 0.010UF K		C670			CC73GCH1H101J	CHIP C 100PF J	E3,E6,E7
C569			CK73HB1H471K	CHIP C 470PF K		C670			CC73GCH1H330J	CHIP C 33PF J	E,E4
C570			CK73HB1C103K	CHIP C 0.010UF K		C671			CC73GCH1H050B	CHIP C 5.0PF B	E3,E6
C571			CK73HB1A104K	CHIP C 0.10UF K	E,E4	C671			CC73GCH1H070B	CHIP C 7.0PF B	E7
C571			CK73HB1H471K	CHIP C 470PF K	E3,E6,E7	C671			CC73GCH1H4R5B	CHIP C 4.5PF B	E,E4
C572			CS77AA1A100M	CHIP TNTL 10UF 10WV		C673			CK73HB1H471K	CHIP C 470PF K	
C573			CK73HB1H471K	CHIP C 470PF K		C675			CC73GCH1H020B	CHIP C 2.0PF B	E,E4
C574,575			CC73HCH1H100D	CHIP C 10PF D		C675			CC73GCH1H040B	CHIP C 4.0PF B	E3,E6,E7
C577,578			CK73HB1H471K	CHIP C 470PF K		C676			CC73GCH1H101J	CHIP C 100PF J	
C579			CC73HCH1H030B	CHIP C 3.0PF B	E3,E6,E7	C677			CC73GCH1H050B	CHIP C 5.0PF B	
C579			CC73HCH1H040B	CHIP C 4.0PF B	E,E4	C678			CC73GCH1H030B	CHIP C 3.0PF B	E,E4
C580,581			CK73HB1H471K	CHIP C 470PF K		C678			CC73GCH1H040B	CHIP C 4.0PF B	E3,E6,E7
C582			CC73HCH1H020B	CHIP C 2.0PF B		C679			CC73GCH1H1R5B	CHIP C 1.5PF B	
C583			CK73HB1A104K	CHIP C 0.10UF K		C680			CC73GCH1H040B	CHIP C 4.0PF B	E,E4
C584			CC73HCH1H100D	CHIP C 10PF D		C680			CC73GCH1H070B	CHIP C 7.0PF B	E3,E6,E7

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C681			CC73GCH1H020B	CHIP C 2.0PF B	E,E4	C756			CC73HCH1H060B	CHIP C 6.0PF B	E7
C681			CC73GCH1H030B	CHIP C 3.0PF B	E3,E6,E7	C757			CC73HCH1H020B	CHIP C 2.0PF B	E3,E6,E7
C682			CC73GCH1H050B	CHIP C 5.0PF B	E,E4	C757			CC73HCH1H1R5B	CHIP C 1.5PF B	E,E4
C682			CC73GCH1H070B	CHIP C 7.0PF B	E3,E6,E7	C758			CK73HB1H471K	CHIP C 470PF K	
C683			CC73GCH1H020B	CHIP C 2.0PF B	E,E4	C759			CC73HCH1H020B	CHIP C 2.0PF B	
C683			CC73GCH1H2R5B	CHIP C 2.5PF B	E3,E6,E7	C760			CK73HB1H471K	CHIP C 470PF K	
C684			CC73GCH1H1R5B	CHIP C 1.5PF B		C761			CC73HCH1H180J	CHIP C 18PF J	E3,E6,E7
C701,702			CK73HB1A104K	CHIP C 0.10UF K		C761			CC73HCH1H330J	CHIP C 33PF J	E,E4
C703			CC73HCH1H330J	CHIP C 33PF J		C762			CC73HCH1H050B	CHIP C 5.0PF B	
C704			CK73HB1C103K	CHIP C 0.010UF K		C763			CK73HB1H471K	CHIP C 470PF K	
C705			CC73HCH1H220J	CHIP C 22PF J		C765			CK73HB1H471K	CHIP C 470PF K	
C706			CC73HCH1H820J	CHIP C 82PF J		C766			CC73HCH1H0R5B	CHIP C 0.5PF B	
C707			CK73HB1H331K	CHIP C 330PF K		C767			CK73HB1H471K	CHIP C 470PF K	
C708,709			CK73HB1A104K	CHIP C 0.10UF K		C769			CK73HB1H471K	CHIP C 470PF K	
C710			CC73HCH1H390J	CHIP C 39PF J		C771			CK73HB1A104K	CHIP C 0.10UF K	
C711			CC73HCH1H820J	CHIP C 82PF J		C772			CK73HB1H471K	CHIP C 470PF K	
C712			CK73HB1H331K	CHIP C 330PF K		C773			CC73HCH1H030B	CHIP C 3.0PF B	
C713			CK73HB1A104K	CHIP C 0.10UF K		C774			CC73HCH1H180J	CHIP C 18PF J	E3,E6,E7
C714			CC73HCH1H390J	CHIP C 39PF J		C774			CC73HCH1H330J	CHIP C 33PF J	E,E4
C715			CK73HB1H471K	CHIP C 470PF K		C776			CC73HCH1H030B	CHIP C 3.0PF B	
C716			CK73HB1H182K	CHIP C 1800PF K		C777			CK73HB1H471K	CHIP C 470PF K	
C717			CK73GB1E105K	CHIP C 1.0UF K		C778			CC73HCH1H030B	CHIP C 3.0PF B	
C718			CS77AA0J220M	CHIP TNL 22UF 6.3WV		C779			CC73HCH1H180J	CHIP C 18PF J	E3,E6,E7
C719			CC73HCH1H820J	CHIP C 82PF J		C779			CC73HCH1H330J	CHIP C 33PF J	E,E4
C720			CK73HB1C103K	CHIP C 0.010UF K		C781			CK73HB1H471K	CHIP C 470PF K	
C721			CK73HB1H471K	CHIP C 470PF K		C782			CC73HCH1H080D	CHIP C 8.0PF D	E3,E6,E7
C722			CK73HB1A104K	CHIP C 0.10UF K		C782			CC73HCH1H330J	CHIP C 33PF J	E,E4
C723			CK73HB1A333K	CHIP C 0.033UF K		C783			CC73HCH1H060B	CHIP C 6.0PF B	E,E4
C724			CC73HCH1H330J	CHIP C 33PF J		C783			CC73HCH1H080B	CHIP C 8.0PF B	E3,E6
C725			CK73HB1A104K	CHIP C 0.10UF K		C783			CC73HCH1H150G	CHIP C 15PF G	E7
C726			CK73HB1C103K	CHIP C 0.010UF K		C784			CC73HCH1H100D	CHIP C 10PF D	
C727			CK73HB1H471K	CHIP C 470PF K		C788			CC73HCH1H060B	CHIP C 6.0PF B	E,E4
C728			CK73HB1C103K	CHIP C 0.010UF K		C788			CC73HCH1H100B	CHIP C 10PF B	E3,E6
C729			CC73HCH1H010B	CHIP C 1.0PF B	E,E4	C788			CC73HCH1H120G	CHIP C 12PF G	E7
C730			CC73HCH1H080B	CHIP C 8.0PF B		C901			CK73HB1H471K	CHIP C 470PF K	
C732,733			CK73HB1C103K	CHIP C 0.010UF K		C904			CK73HB1H471K	CHIP C 470PF K	
C734,735			CK73HB1H471K	CHIP C 470PF K		C906			CK73HB1C103K	CHIP C 0.010UF K	
C736			CK73HB1C103K	CHIP C 0.010UF K		C917			CK73HB1A104K	CHIP C 0.10UF K	
C737			CC73HCH1H060B	CHIP C 6.0PF B		C921			CK73HB1C223K	CHIP C 0.022UF K	
C738			CC73HCH1H120J	CHIP C 12PF J		C923-926			CK73HB1H471K	CHIP C 470PF K	
C739			CC73HCH1H020B	CHIP C 2.0PF B	E,E3,E4	TC501,502			C05-0384-05	CERAMIC TRIMMER (10PF)	
C739			CC73HCH1H020B	CHIP C 2.0PF B	E6	101	2A		E37-1141-15	FLAT CABLE	
C739			CC73HCH1H030B	CHIP C 3.0PF B	E7	CN1			E40-6519-05	PIN ASSY	
C740			CC73HCH1H100D	CHIP C 10PF D		CN8			E40-6568-05	FLAT CABLE CONNECTOR	
C741			CK73HB1C103K	CHIP C 0.010UF K		CN18			E40-6456-05	FLAT CABLE CONNECTOR	
C743			CC73HCH1H010B	CHIP C 1.0PF B		CN60			E40-5932-05	SOCKET FOR PIN ASSY	
C744,745			CK73HB1H471K	CHIP C 470PF K		CN71			E40-6568-05	FLAT CABLE CONNECTOR	
C746			CC73HCH1H030B	CHIP C 3.0PF B	E3,E6,E7	CN901			E40-6456-05	FLAT CABLE CONNECTOR	
C746			CC73HCH1H050B	CHIP C 5.0PF B	E,E4	J1			E11-0707-05	PHONE JACK (2.5/3.5)	
C747,748			CK73HB1H471K	CHIP C 470PF K		102	2A		F12-0476-04	SHIELDING SHEET	E,E4
C749			CC73HCH1H040B	CHIP C 4.0PF B	E3,E6,E7	F901			F53-0324-05	FUSE (2.5A)	
C749			CC73HCH1H3R5B	CHIP C 3.5PF B	E,E4	-			G11-4427-04	SHEET (PHONE JACK)	
C750			CC73HCH1H180J	CHIP C 18PF J	E3,E6,E7	CD701			L79-1474-05	TUNING COIL	
C750			CC73HCH1H330J	CHIP C 33PF J	E,E4	CF701			L72-1010-05	CERAMIC FILTER	
C752			CC73HCH1H020B	CHIP C 2.0PF B		CF702			L72-1012-05	CERAMIC FILTER	
C754			CC73HCH1H020B	CHIP C 2.0PF B		L1			L92-0140-05	CHIP FERRITE	
C755			CC73HCH1H180J	CHIP C 18PF J	E3,E6,E7	L2-5			L92-0138-05	CHIP FERRITE	
C755			CC73HCH1H330J	CHIP C 33PF J	E,E4						
C756			CC73HCH1H050B	CHIP C 5.0PF B	E,E3,E4						
C756			CC73HCH1H050B	CHIP C 5.0PF B	E6						

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
L8			L92-0138-05	CHIP FERRITE		L706			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	
L10			L92-0140-05	CHIP FERRITE		L707			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	E,E3,E4
L11			L92-0149-05	CHIP FERRITE		L707			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	E6
L12,13			L92-0419-15	CHIP FERRITE		L707			L40-2275-57	SMALL FIXED INDUCTOR (22.0NH)	E7
L14-16			L92-0138-05	CHIP FERRITE		L709			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	E,E4
L501			L41-4795-39	SMALL FIXED INDUCTOR (4.7UH)		L709			L40-3375-57	SMALL FIXED INDUCTOR (33.0NH)	E3,E6
L502			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	E,E4	L709			L40-4775-57	SMALL FIXED INDUCTOR (47.0NH)	E7
L502			L40-3963-57	SMALL FIXED INDUCTOR (3.9NH)	E3,E6,E7	L711-713			L41-1078-14	SMALL FIXED INDUCTOR (10NH)	E7
L503			L92-0138-05	CHIP FERRITE		L711-713			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)	E,E3,E4
L505			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	E3,E6,E7	L711-713			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)	E6
L505,506			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	E,E4	L714			L92-0138-05	CHIP FERRITE	
L506			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	E3,E6,E7	L715			L41-1575-45	SMALL FIXED INDUCTOR (15NH)	
L507			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	E,E4	L717,718			L41-1078-14	SMALL FIXED INDUCTOR (10NH)	E7
L507			L40-3963-57	SMALL FIXED INDUCTOR (3.9NH)	E3,E6,E7	L717,718			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)	E,E3,E4
L508			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	E3,E6,E7	L717,718			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)	E6
L508,509			L40-8275-92	SMALL FIXED INDUCTOR (82NH)	E,E4	L719			L41-4775-45	SMALL FIXED INDUCTOR (47NH)	
L509			L40-1285-92	SMALL FIXED INDUCTOR (120NH)	E3,E6,E7	L720			L40-1575-57	SMALL FIXED INDUCTOR (15.0NH)	E,E4
L511			L40-1275-57	SMALL FIXED INDUCTOR (12.0NH)	E,E4	L720			L40-6865-57	SMALL FIXED INDUCTOR (6.8NH)	E3,E6,E7
L511			L40-1575-57	SMALL FIXED INDUCTOR (15.0NH)	E3,E6,E7	L901			L92-0149-05	CHIP FERRITE	
L512			L41-1875-43	SMALL FIXED INDUCTOR (18NH)	E,E4	X1			L77-1950-05	CRYSTAL RESONATOR (11.0592MHZ)	
L512			L41-2275-43	SMALL FIXED INDUCTOR (22NH)	E3,E6	X2			L77-1976-05	CRYSTAL RESONATOR (3.6864MHZ)	
L512			L41-2775-43	SMALL FIXED INDUCTOR (27NH)	E7	X501			L77-1971-05	TCXO (16.8MHZ)	
L513			L41-2278-14	SMALL FIXED INDUCTOR (22NH)	E,E4	XF701			L71-0617-25	MCF (49.95MHZ)	
L513			L41-2778-14	SMALL FIXED INDUCTOR (27NH)	E3,E6						
L513			L41-3378-14	SMALL FIXED INDUCTOR (33NH)	E7	CP1			RK74HB1J473J	CHIP-COM 47K J 1/16W	
L514			L41-1585-45	SMALL FIXED INDUCTOR (150NH)	E,E4	CP3,4			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L514,515			L41-2285-45	SMALL FIXED INDUCTOR (220NH)	E3,E6,E7	CP5			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L515			L41-1885-45	SMALL FIXED INDUCTOR (180NH)	E,E4	CP7,8			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L517			L41-2785-45	SMALL FIXED INDUCTOR (270NH)		CP10			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L518			L40-1585-92	SMALL FIXED INDUCTOR (150NH)	E,E4	CP11			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L518			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	E3,E6,E7	CP12,13			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L519			L92-0138-05	CHIP FERRITE		CP16			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L521			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)		CP18			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L524			L40-2275-57	SMALL FIXED INDUCTOR (22.0NH)		CP19			RK75HA1J473J	CHIP-COM 47K J 1/16W	
L601			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	E,E3,E4	CP22-24			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L601			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	E6	CP28			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L601			L40-2775-71	SMALL FIXED INDUCTOR (27NH)	E7	CP30			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L602			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	E,E3,E4	CP32			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L602			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	E6	CP34			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L602			L40-1875-71	SMALL FIXED INDUCTOR (18NH)	E7	CP36			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L603			L92-0138-05	CHIP FERRITE		CP38			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L605			L40-6865-57	SMALL FIXED INDUCTOR (6.8NH)	E,E3,E4	CP40			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L605			L40-6865-57	SMALL FIXED INDUCTOR (6.8NH)	E6	CP42,43			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L605			L40-6865-71	SMALL FIXED INDUCTOR (6.8NH)	E7	CP44			RK75HA1J474J	CHIP-COM 470K J 1/16W	
L606			L41-1575-45	SMALL FIXED INDUCTOR (15NH)		CP45-47			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L607			L92-0149-05	CHIP FERRITE		CP48,49			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L608			L40-1263-92	SMALL FIXED INDUCTOR (1.2NH)	E3,E6,E7	CP50			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L611			L34-4576-05	AIR-CORE COIL		CP54			RK75HA1J473J	CHIP-COM 47K J 1/16W	
L612			L92-0149-05	CHIP FERRITE		R1			RK73GB2A000J	CHIP R 0.0 J 1/10W	
L613			L41-4763-14	SMALL FIXED INDUCTOR (4.7NH)	E7	R2			RK73HB1J153J	CHIP R 15K J 1/16W	
L613			L41-5668-14	SMALL FIXED INDUCTOR (5.6NH)	E,E3,E4	R7			RK73HB1J102J	CHIP R 1.0K J 1/16W	
L613			L41-5668-14	SMALL FIXED INDUCTOR (5.6NH)	E6	R8			RK73HB1J272J	CHIP R 2.7K J 1/16W	
L614			L41-2285-45	SMALL FIXED INDUCTOR (220NH)		R9			RK73HB1J332J	CHIP R 3.3K J 1/16W	
L615-618			L34-4564-05	AIR-CORE COIL		R11			RK73HB1J473J	CHIP R 47K J 1/16W	
L619			L41-1092-44	SMALL FIXED INDUCTOR (1UH)		R12			RK73HB1J334J	CHIP R 330K J 1/16W	
L701			L40-1885-92	SMALL FIXED INDUCTOR (180NH)		R13			RK73HB1J332J	CHIP R 3.3K J 1/16W	
L702			L40-1085-57	SMALL FIXED INDUCTOR (100NH)		R14			RK73HB1J102J	CHIP R 1.0K J 1/16W	
L703			L40-1591-86	SMALL FIXED INDUCTOR (1.5UH)		R15			RK73HB1J272J	CHIP R 2.7K J 1/16W	
L704			L92-0138-05	CHIP FERRITE		R16			RK73HB1J331J	CHIP R 330 J 1/16W	
L705			L41-5685-39	SMALL FIXED INDUCTOR (0.56UH)		R17			RK73HB1J821J	CHIP R 820 J 1/16W	

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
R18			RK73GB2A100J	CHIP R 10 J 1/10W		R116			RK73HB1J393J	CHIP R 39K J 1/16W	
R20			RK73HB1J103J	CHIP R 10K J 1/16W		R117			RK73HB1J683J	CHIP R 68K J 1/16W	
R21			RK73HB1J821J	CHIP R 820 J 1/16W		R119			RK73HB1J101J	CHIP R 100 J 1/16W	
R22,23			RK73HB1J000J	CHIP R 0.0 J 1/16W		R121			RK73HB1J184J	CHIP R 180K J 1/16W	
R24			RK73HB1J224J	CHIP R 220K J 1/16W		R122			RK73HB1J154J	CHIP R 150K J 1/16W	
R25			RK73HB1J153J	CHIP R 15K J 1/16W		R125			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R26			RK73HB1J000J	CHIP R 0.0 J 1/16W		R129			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R27,28			RK73HH1J474D	CHIP R 470K D 1/16W		R130			RK73HB1J474J	CHIP R 470K J 1/16W	
R31			RK73HB1J103J	CHIP R 10K J 1/16W		R131,132			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R36			RK73GB2A433J	CHIP R 43K J 1/10W		R134			RK73HB1J104J	CHIP R 100K J 1/16W	
R37			RK73HB1J103J	CHIP R 10K J 1/16W		R135			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R39,40			RK73HB1J473J	CHIP R 47K J 1/16W		R137			RK73HB1J223J	CHIP R 22K J 1/16W	
R42-44			RK73HB1J103J	CHIP R 10K J 1/16W		R139			RK73HB1J103J	CHIP R 10K J 1/16W	
R45,46			RK73HB1J102J	CHIP R 1.0K J 1/16W		R140			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R48-52			RK73HB1J473J	CHIP R 47K J 1/16W		R141			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R53			RK73HB1J474J	CHIP R 470K J 1/16W		R142			RK73HB1J223J	CHIP R 22K J 1/16W	
R54			RK73HB1J102J	CHIP R 1.0K J 1/16W		R143			RK73HB1J473J	CHIP R 47K J 1/16W	
R55,56			RK73HB1J474J	CHIP R 470K J 1/16W		R144			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R57			RK73HB1J103J	CHIP R 10K J 1/16W		R145			RK73HB1J154J	CHIP R 150K J 1/16W	
R58,59			RK73HB1J473J	CHIP R 47K J 1/16W		R146			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R61			RK73HB1J331J	CHIP R 330 J 1/16W		R147			RK73HB1J103J	CHIP R 10K J 1/16W	
R62			RK73HB1J103J	CHIP R 10K J 1/16W		R149			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R63			RK73HB1J332J	CHIP R 3.3K J 1/16W		R150			RK73HB1J153J	CHIP R 15K J 1/16W	
R64			RK73HB1J102J	CHIP R 1.0K J 1/16W		R151			RK73HB1J183J	CHIP R 18K J 1/16W	
R65,66			RK73HB1J473J	CHIP R 47K J 1/16W		R152			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R67			RK73HB1J472J	CHIP R 4.7K J 1/16W		R153			RK73HB1J332J	CHIP R 3.3K J 1/16W	
R68			RK73GB2A181J	CHIP R 180 J 1/10W		R154			RK73HB1J333J	CHIP R 33K J 1/16W	
R69			RK73HB1J102J	CHIP R 1.0K J 1/16W		R155			RK73HB1J223J	CHIP R 22K J 1/16W	
R71			RK73HB1J102J	CHIP R 1.0K J 1/16W		R156,157			RK73HB1J304J	CHIP R 300K J 1/16W	
R72			RK73GB2A181J	CHIP R 180 J 1/10W		R158			RK73HB1J334J	CHIP R 330K J 1/16W	
R73,74			RK73HB1J474J	CHIP R 470K J 1/16W		R159			RK73HB1J474J	CHIP R 470K J 1/16W	
R75			RK73GB2A391J	CHIP R 390 J 1/10W	E,E3,E7	R160			RK73HB1J224J	CHIP R 220K J 1/16W	
R76-80			RK73HB1J102J	CHIP R 1.0K J 1/16W		R161,162			RK73HB1J124J	CHIP R 120K J 1/16W	
R82			RK73GB2A391J	CHIP R 390 J 1/10W	E,E3,E7	R163			RK73HB1J393J	CHIP R 39K J 1/16W	
R83			RK73GB2A000J	CHIP R 0.0 J 1/10W		R164			RK73HB1J184J	CHIP R 180K J 1/16W	
R84			RK73HB1J184J	CHIP R 180K J 1/16W		R165			RK73HB1J154J	CHIP R 150K J 1/16W	
R89			RK73HB1J102J	CHIP R 1.0K J 1/16W		R166			RK73HB1J103J	CHIP R 10K J 1/16W	
R90			RK73HB1J394J	CHIP R 390K J 1/16W		R167			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R91			RK73HB1J332J	CHIP R 3.3K J 1/16W		R168			RK73HB1J474J	CHIP R 470K J 1/16W	
R92			RK73HB1J473J	CHIP R 47K J 1/16W		R169			RK73HB1J223J	CHIP R 22K J 1/16W	
R93			RK73HB1J393J	CHIP R 39K J 1/16W		R170			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R94			RK73HB1J684J	CHIP R 680K J 1/16W		R171			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R95,96			RK73HB1J102J	CHIP R 1.0K J 1/16W		R172			RK73HB1J684J	CHIP R 680K J 1/16W	
R97			RK73HB1J474J	CHIP R 470K J 1/16W		R173			RK73HB1J184J	CHIP R 180K J 1/16W	
R98,99			RK73HB1J473J	CHIP R 47K J 1/16W		R174			RK73HB1J123J	CHIP R 12K J 1/16W	
R100			RK73HB1J223J	CHIP R 22K J 1/16W		R175			RK73HB1J103J	CHIP R 10K J 1/16W	
R101			RK73HB1J103J	CHIP R 10K J 1/16W		R176			RK73HB1J683J	CHIP R 68K J 1/16W	
R102			RK73HB1J473J	CHIP R 47K J 1/16W		R177			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R103			RK73HB1J105J	CHIP R 1.0M J 1/16W		R178			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R104			RK73HB1J103J	CHIP R 10K J 1/16W		R180			RK73HB1J103J	CHIP R 10K J 1/16W	
R105			RK73HB1J472J	CHIP R 4.7K J 1/16W		R181			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R106			RK73HB1J473J	CHIP R 47K J 1/16W		R183			RK73HB1J103J	CHIP R 10K J 1/16W	
R107			RK73HB1J564J	CHIP R 560K J 1/16W		R184			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R108			RK73HB1J334J	CHIP R 330K J 1/16W		R187			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R109			RK73HB1J684J	CHIP R 680K J 1/16W		R191			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R111			RK73HB1J564J	CHIP R 560K J 1/16W		R192,193			RK73HB1J104J	CHIP R 100K J 1/16W	
R112			RK73HB1J334J	CHIP R 330K J 1/16W		R194,195			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R113			RK73HB1J000J	CHIP R 0.0 J 1/16W		R196			RK73HB1J151J	CHIP R 150 J 1/16W	
R114			RK73HB1J184J	CHIP R 180K J 1/16W		R198			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R115			RK73GB2A103J	CHIP R 10K J 1/10W		R199			RK73HB1J472J	CHIP R 4.7K J 1/16W	

PARTS LIST

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Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R200			RK73HB1J473J	CHIP R 47K J 1/16W		R516			RK73HB1J331J	CHIP R 330 J 1/16W	E,E4
R202			RK73HB1J102J	CHIP R 1.0K J 1/16W		R517			RK73HB1J103J	CHIP R 10K J 1/16W	
R203			RK73HB1J222J	CHIP R 2.2K J 1/16W		R518			RK73HB1J101J	CHIP R 100 J 1/16W	
R204			RK73HB1J104J	CHIP R 100K J 1/16W		R519,520			RK73HB1J103J	CHIP R 10K J 1/16W	
R205			RK73HB1J105J	CHIP R 1.0M J 1/16W		R521			RK73HB1J101J	CHIP R 100 J 1/16W	E,E4
R206			RK73HB1J000J	CHIP R 0.0 J 1/16W		R521,522			RK73HB1J101J	CHIP R 100 J 1/16W	E3,E6,E7
R207			RK73HB1J154J	CHIP R 150K J 1/16W		R522			RK73HB1J220J	CHIP R 22 J 1/16W	E,E4
R210			RK73HB1J471J	CHIP R 470 J 1/16W		R523			RK73HB1J473J	CHIP R 47K J 1/16W	
R211			RK73HB1J474J	CHIP R 470K J 1/16W		R525			RK73HB1J101J	CHIP R 100 J 1/16W	
R212			RK73GB2A101J	CHIP R 100 J 1/10W		R527			RK73HB1J104J	CHIP R 100K J 1/16W	E3,E6,E7
R213			RK73HB1J101J	CHIP R 100 J 1/16W		R527			RK73HB1J224J	CHIP R 220K J 1/16W	E,E4
R214			RK73HB1J182J	CHIP R 1.8K J 1/16W		R529			RK73HB1J151J	CHIP R 150 J 1/16W	E,E4
R215			RK73HB1J334J	CHIP R 330K J 1/16W		R529,530			RK73HB1J181J	CHIP R 180 J 1/16W	E3,E6,E7
R216			RK73HB1J274J	CHIP R 270K J 1/16W		R530			RK73HB1J181J	CHIP R 180 J 1/16W	E,E4
R218			RK73GB2A000J	CHIP R 0.0 J 1/10W		R531,532			RK73HB1J220J	CHIP R 22 J 1/16W	
R220			RK73GB2A102J	CHIP R 1.0K J 1/10W		R533			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R221			RK73HB1J473J	CHIP R 47K J 1/16W		R534			RK73HB1J154J	CHIP R 150K J 1/16W	
R222,223			RK73HB1J102J	CHIP R 1.0K J 1/16W		R535			RK73HB1J101J	CHIP R 100 J 1/16W	
R224			RK73HB1J104J	CHIP R 100K J 1/16W		R541			RK73HB1J154J	CHIP R 150K J 1/16W	
R225			RK73HB1J154J	CHIP R 150K J 1/16W		R542			RK73HB1J331J	CHIP R 330 J 1/16W	E3,E6,E7
R226			RK73HB1J184J	CHIP R 180K J 1/16W		R542			RK73HB1J680J	CHIP R 68 J 1/16W	E,E4
R229			RK73HB1J473J	CHIP R 47K J 1/16W		R544			RK73HB1J470J	CHIP R 47 J 1/16W	
R230			RK73HB1J123J	CHIP R 12K J 1/16W		R545			RK73HH1J333D	CHIP R 33K D 1/16W	
R232			RK73HB1J823J	CHIP R 82K J 1/16W		R546			RK73HH1J104D	CHIP R 100K D 1/16W	
R236			RK73HB1J124J	CHIP R 120K J 1/16W		R547			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R238			RK73HB1J474J	CHIP R 470K J 1/16W		R548			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R239			RK73HB1J104J	CHIP R 100K J 1/16W		R550			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R240			RK73HB1J474J	CHIP R 470K J 1/16W		R551,552			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R241			RK73HB1J473J	CHIP R 47K J 1/16W		R558			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R242			RK73HB1J104J	CHIP R 100K J 1/16W		R601			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R243			RK73HB1J474J	CHIP R 470K J 1/16W		R602			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R244			RK73HB1J473J	CHIP R 47K J 1/16W		R603			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R245			RK73HB1J103J	CHIP R 10K J 1/16W		R604			RK73HB1J333J	CHIP R 33K J 1/16W	
R246			RK73HB1J223J	CHIP R 22K J 1/16W		R605			RK73HB1J101J	CHIP R 100 J 1/16W	E3,E6,E7
R247			RK73HB1J184J	CHIP R 180K J 1/16W		R605			RK73HB1J470J	CHIP R 47 J 1/16W	E,E4
R248			RK73GB2A000J	CHIP R 0.0 J 1/10W		R606			RK73HB1J471J	CHIP R 470 J 1/16W	E3,E6,E7
R250			RK73GB2A000J	CHIP R 0.0 J 1/10W		R607			RK73HB1J220J	CHIP R 22 J 1/16W	
R251			RK73HB1J474J	CHIP R 470K J 1/16W		R608			RK73HB1J331J	CHIP R 330 J 1/16W	
R254,255			RK73HB1J474J	CHIP R 470K J 1/16W		R609			RK73HB1J330J	CHIP R 33 J 1/16W	
R256-258			RK73GB2A000J	CHIP R 0.0 J 1/10W		R610			RK73HB1J331J	CHIP R 330 J 1/16W	
R259			RK73HB1J103J	CHIP R 10K J 1/16W		R611			RK73HB1J823J	CHIP R 82K J 1/16W	
R261			RK73HB1J103J	CHIP R 10K J 1/16W		R612			RK73HB1J221J	CHIP R 220 J 1/16W	
R262			RK73HB1J473J	CHIP R 47K J 1/16W		R613			RK73HB1J563J	CHIP R 56K J 1/16W	
R263			RK73HB1J000J	CHIP R 0.0 J 1/16W		R614			RK73HB1J471J	CHIP R 470 J 1/16W	
R501,502			RK73HB1J102J	CHIP R 1.0K J 1/16W		R618			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R503			RK73HB1J470J	CHIP R 47 J 1/16W		R619			RK73HB1J103J	CHIP R 10K J 1/16W	
R504			RK73HB1J103J	CHIP R 10K J 1/16W		R620			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R505			RK73HB1J102J	CHIP R 1.0K J 1/16W		R621			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R506			RK73HB1J154J	CHIP R 150K J 1/16W		R622			RK73HB1J220J	CHIP R 22 J 1/16W	
R507			RK73HB1J101J	CHIP R 100 J 1/16W		R623			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R508			RK73HB1J330J	CHIP R 33 J 1/16W		R624			RK73HB1J104J	CHIP R 100K J 1/16W	
R509			RK73HB1J272J	CHIP R 2.7K J 1/16W		R625			RK73HB1J680J	CHIP R 68 J 1/16W	
R510-512			RK73HB1J000J	CHIP R 0.0 J 1/16W		R626			RK73GB2A000J	CHIP R 0.0 J 1/10W	E,E4
R513			RK73HB1J470J	CHIP R 47 J 1/16W		R627			RK73HB1J223J	CHIP R 22K J 1/16W	
R514			RK73HB1J102J	CHIP R 1.0K J 1/16W	E,E4,E7	R628			RK73HB1J183J	CHIP R 18K J 1/16W	
R514			RK73HB1J152J	CHIP R 1.5K J 1/16W	E3,E6	R629			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R515			RK73HB1J331J	CHIP R 330 J 1/16W	E7	R630,631			RK73HB1J154D	CHIP R 150K D 1/16W	
R515			RK73HB1J561J	CHIP R 560 J 1/16W	E,E4	R632,633			RK73HH1J334D	CHIP R 330K D 1/16W	
R515,516			RK73HB1J331J	CHIP R 330 J 1/16W	E3,E6	R634			RK73HB1J103J	CHIP R 10K J 1/16W	
R516			RK73HB1J000J	CHIP R 0.0 J 1/16W	E7	R635			RK73HB1J473J	CHIP R 47K J 1/16W	

PARTS LIST

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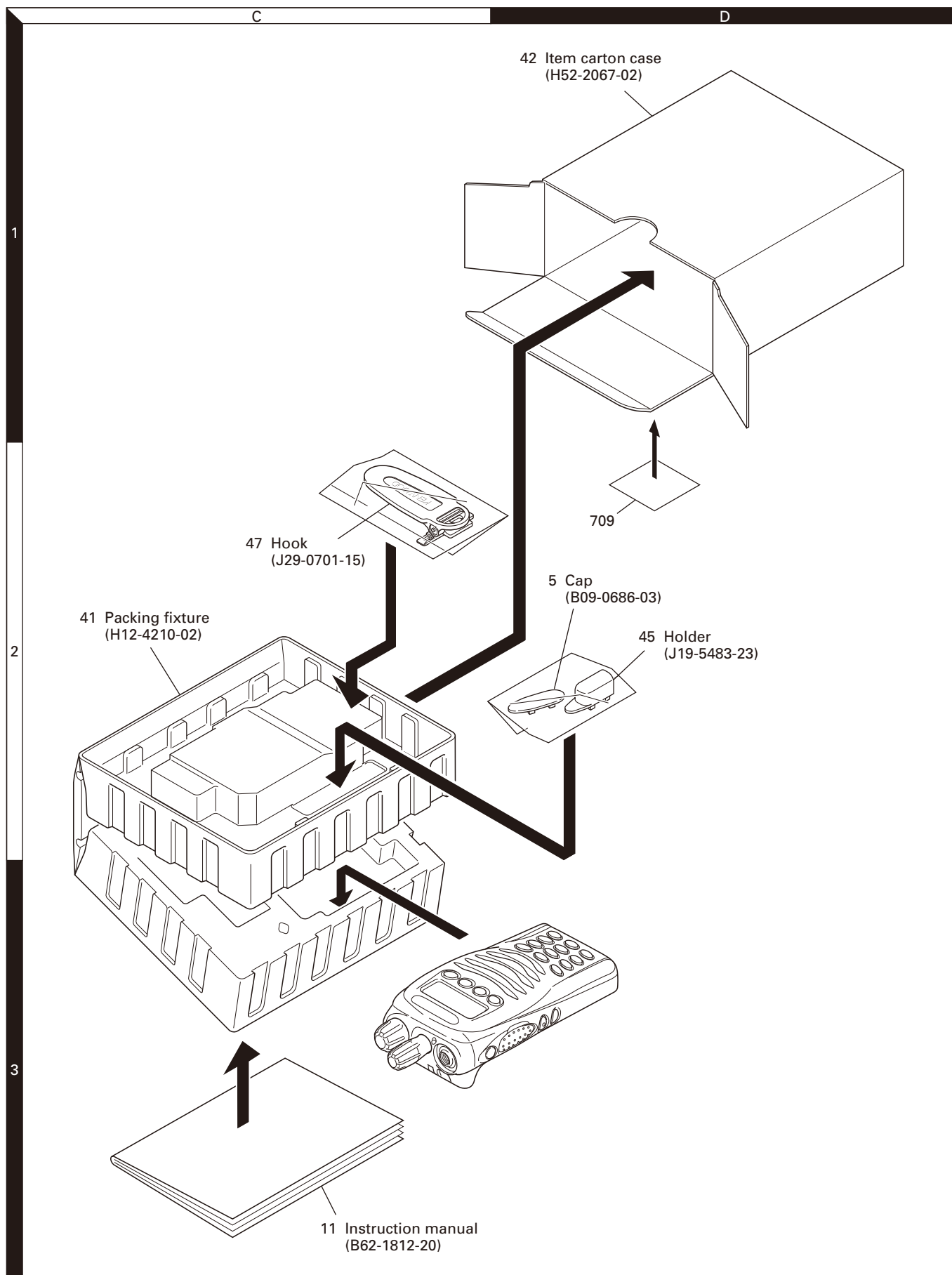
Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R636			RK73HB1J000J	CHIP R 0.0 J 1/16W		R751			RK73HB1J683J	CHIP R 68K J 1/16W	E,E4
R637			RK73HB1J223J	CHIP R 22K J 1/16W		R753			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R638			RK73HB1J474J	CHIP R 470K J 1/16W		R754,755			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R639			RK73HB1J184J	CHIP R 180K J 1/16W		R756			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R640			RK73HB1J474J	CHIP R 470K J 1/16W		R757			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R641			RK73GB2A000J	CHIP R 0.0 J 1/10W		R758			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R642			RK73HB1J220J	CHIP R 22 J 1/16W		R759			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R643			RK73HB1J683J	CHIP R 68K J 1/16W		R760			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R645,646			RK73GB2A271J	CHIP R 270 J 1/10W		R903			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R647			RK73GB2A000J	CHIP R 0.0 J 1/10W		R913-916			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R648			RK73HB1J000J	CHIP R 0.0 J 1/16W	E,E4	R923			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R648			RK73HB1J5R6J	CHIP R 5.6 J 1/16W	E3,E6,E7	S1			S70-0424-05	TACT SWITCH	
R649			RK73HB1J473J	CHIP R 47K J 1/16W		S2			S70-0457-05	TACT SWITCH	
R701			RK73HB1J103J	CHIP R 10K J 1/16W		S3,4			S70-0424-05	TACT SWITCH	
R702,703			RK73HB1J472J	CHIP R 4.7K J 1/16W		D1			RB521S-30	DIODE	
R704			RK73HB1J224J	CHIP R 220K J 1/16W		D4			MA2S111-F	DIODE	
R705,706			RK73HB1J472J	CHIP R 4.7K J 1/16W		D16,17			MA2S111-F	DIODE	
R707			RK73HB1J101J	CHIP R 100 J 1/16W		D24-27			MA2S111-F	DIODE	
R708			RK73HB1J103J	CHIP R 10K J 1/16W		D28-31			RB706F-40	DIODE	
R710			RK73HB1J102J	CHIP R 1.0K J 1/16W		D32			DA221	DIODE	
R711			RK73HB1J474J	CHIP R 470K J 1/16W		D33			AVRM16270MABB	VARISTOR	
R713			RK73HB1J334J	CHIP R 330K J 1/16W		D501			MA2S077-F	DIODE	
R715,716			RK73HB1J332J	CHIP R 3.3K J 1/16W		D502,503			HSC277	DIODE	
R717			RK73HB1J272J	CHIP R 2.7K J 1/16W		D505			1SV325F	VARIABLE CAPACITANCE DIODE	
R718			RK73HB1J100J	CHIP R 10 J 1/16W		D507			1SV325F	VARIABLE CAPACITANCE DIODE	
R719			RK73HB1J332J	CHIP R 3.3K J 1/16W		D509			1SV325F	VARIABLE CAPACITANCE DIODE	
R721			RK73HB1J224J	CHIP R 220K J 1/16W		D511			1SV325F	VARIABLE CAPACITANCE DIODE	
R722			RK73HB1J101J	CHIP R 100 J 1/16W		D513			1SV278F	VARIABLE CAPACITANCE DIODE	
R726			RK73HB1J474J	CHIP R 470K J 1/16W		D514-516			HSC277	DIODE	
R727			RK73HB1J681J	CHIP R 680 J 1/16W		D517			MA2S077-F	DIODE	
R728			RK73HB1J101J	CHIP R 100 J 1/16W	E3,E6,E7	D601			UDZW4.7(B)	ZENER DIODE	
R728			RK73HB1J331J	CHIP R 330 J 1/16W	E,E4	D604-608			HSC277	DIODE	E7
R729			RK73HB1J470J	CHIP R 47 J 1/16W		D604-608			HVC131	DIODE	E,E3,E4
R730			RK73HB1J472J	CHIP R 4.7K J 1/16W		D604-608			HVC131	DIODE	E6
R732			RK73HB1J391J	CHIP R 390 J 1/16W		D701,702			DAN235E	DIODE	
R733			RK73HB1J000J	CHIP R 0.0 J 1/16W		D703-707			HVC355B	VARIABLE CAPACITANCE DIODE	E,E4
R734			RK73HB1J104J	CHIP R 100K J 1/16W	E7	D703-708			HVC350B	VARIABLE CAPACITANCE DIODE	E3,E6,E7
R734			RK73HB1J563J	CHIP R 56K J 1/16W	E,E3,E4	D708			HVC350B	VARIABLE CAPACITANCE DIODE	E,E4
R734			RK73HB1J563J	CHIP R 56K J 1/16W	E6	D901			GN1G	DIODE	
R735			RK73HB1J104J	CHIP R 100K J 1/16W	E,E3,E4	IC1			XC61CC5002NR	MOS-IC	
R735			RK73HB1J154J	CHIP R 150K J 1/16W	E6	IC2			XC6204B502PR	MOS-IC	
R736			RK73HB1J104J	CHIP R 100K J 1/16W	E7	IC3			XC61CN3402NR	MOS-IC	
R736			RK73HB1J563J	CHIP R 56K J 1/16W	E,E3,E4	IC4,5			BU4094BCFV	MOS-IC	
R736			RK73HB1J563J	CHIP R 56K J 1/16W	E6	IC6			LC75834W-E	MOS-IC	
R737			RK73HB1J104J	CHIP R 100K J 1/16W	E,E3,E4	IC7			30625MGP234HU	MICROPROCESSOR IC	
R737			RK73HB1J104J	CHIP R 100K J 1/16W	E6	IC8			AT29C040A-90TU	ROM IC	
R737			RK73HB1J224J	CHIP R 220K J 1/16W	E7	IC9			CAT24C64WI-G	ROM IC	
R738			RK73HB1J120J	CHIP R 12 J 1/16W	E,E4	IC10-12			TK62012F	MOS-IC	
R738			RK73HB1J180J	CHIP R 18 J 1/16W	E3,E6	IC13			AQUA-L	MOS-IC	
R738			RK73HB1J470J	CHIP R 47 J 1/16W	E7	IC14			TC7W53FK(F)	MOS-IC	
R739-741			RK73HB1J105J	CHIP R 1.0M J 1/16W		IC15			TK62012F	MOS-IC	
R743			RK73HB1J220J	CHIP R 22 J 1/16W	E,E3,E4	IC16			M62364FP-F	MOS-IC	
R743			RK73HB1J220J	CHIP R 22 J 1/16W	E6	IC17			TK62012F	MOS-IC	
R743			RK73HB1J470J	CHIP R 47 J 1/16W	E7	IC18			TA7368FG	MOS-IC	
R744			RK73HB1J221J	CHIP R 220 J 1/16W		IC19			TC75S51FE(F)	MOS-IC	
R747			RK73HB1J104J	CHIP R 100K J 1/16W		IC501			ADF4111BCP7	MOS-IC	
R748			RK73HB1J824J	CHIP R 820K J 1/16W	E3,E6	IC601			TA75W01FUF	MOS-IC	
R750			RK73HB1J104J	CHIP R 100K J 1/16W	E,E4	IC701			TA31136FNG	MOS-IC	
R750,751			RK73HB1J104J	CHIP R 100K J 1/16W	E3,E6,E7	Q1			UMG3N	TRANSISTOR	

PARTS LIST

TX-RX UNIT (X57-7012-XX)

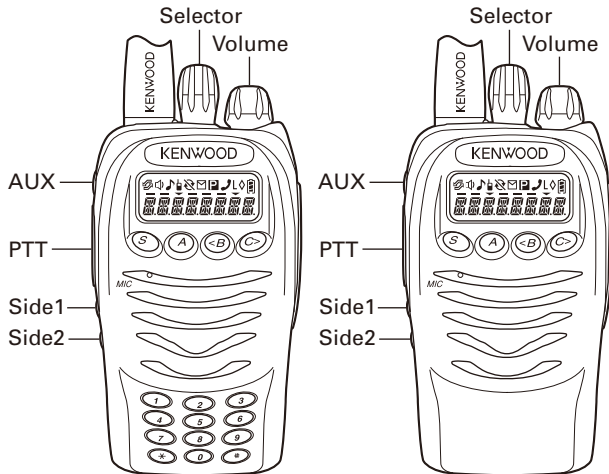
Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
Q4			FP210	TRANSISTOR							
Q5			UPA672T-A	FET							
Q6			UMG3N	TRANSISTOR							
Q7			UPA672T-A	FET							
Q8			DTA114EE	DIGITAL TRANSISTOR							
Q9			SSM6J08FU(F)	FET							
Q12			2SC4617(S)	TRANSISTOR							
Q13			2SB1132(O,R)	TRANSISTOR							
Q14,15			SSM3K15TE(F)	FET							
Q16			2SA1774(S)	TRANSISTOR							
Q17			2SC4649(N,P)	TRANSISTOR							
Q19			SSM3K15TE(F)	FET							
Q21			RN4910(F)	TRANSISTOR							
Q22			SSM3K15TE(F)	FET							
Q23			DTC144EE	DIGITAL TRANSISTOR							
Q24			SSM6J08FU(F)	FET							
Q25			2SK1830F	FET							
Q26			2SJ347F	FET							
Q27			DTC144EE	DIGITAL TRANSISTOR							
Q28			SSM3K01T(F)	FET							
Q29			SSM3K15TE(F)	FET							
Q30			2SJ243-A	FET							
Q31,32			2SC4649(N,P)	TRANSISTOR							
Q33			2SJ347F	FET							
Q34			SSM3K15TE(F)	FET							
Q35			SSM3K01T(F)	FET							
Q501			2SC5488	TRANSISTOR							
Q502,503			2SK508NV(K52)	FET							
Q504			SSM6P05FU(F)	FET							
Q505			2SC4617(S)	TRANSISTOR							
Q506,507			2SC5488	TRANSISTOR							
Q601			2SC5488	TRANSISTOR	E,E3,E4						
Q601			2SC5488	TRANSISTOR	E6						
Q601			2SC5636	TRANSISTOR	E7						
Q602			2SK3077F	FET							
Q603			RD01MUS1-T113	FET							
Q604			2SK3476-F	FET							
Q605			DTC114EE	DIGITAL TRANSISTOR							
Q606			2SK879(GR)F	FET							
Q607			DTC114EE	DIGITAL TRANSISTOR							
Q608			DTA144EE	DIGITAL TRANSISTOR							
Q609			SSM3K15TE(F)	FET							
Q701			2SC4649(N,P)	TRANSISTOR							
Q702			DTA144EE	DIGITAL TRANSISTOR							
Q703			2SC4649(N,P)	TRANSISTOR							
Q704,705			3SK318	FET							
TH501			B57331V2104J	THERMISTOR							
TH701,702			B57331V2104J	THERMISTOR							

PACKING

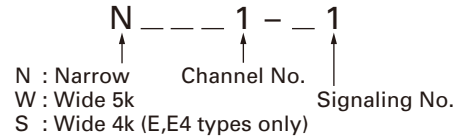


ADJUSTMENT

Controls



• LCD display in panel test mode



■ Frequency and Signaling

The transceiver has been adjusted for the frequencies shown in the following table. When required, readjust them following the adjustment procedure to obtain the frequencies you want in actual operation.

• Test frequency

CH	E, E4		E3, E6		E7	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
1	455.05000	455.10000	415.05000	415.10000	390.05000	390.10000
2	440.05000	440.10000	400.05000	400.10000	380.05000	380.10000
3	469.95000	469.90000	429.95000	429.90000	399.95000	399.90000
4	455.00000	455.00000	415.00000	415.00000	390.00000	390.00000
5	455.20000	455.20000	415.20000	415.20000	390.20000	390.20000
6	455.40000	455.40000	415.40000	415.40000	390.40000	390.40000
7~16	-	-	-	-	-	-

Panel Test Mode

■ Test mode operation features

This transceiver has a test mode. **To enter test mode, press [A] key and turn power on. Hold [A] key until frequency version appears on LCD.** Test mode can be inhibited by programming. To exit test mode, switch the power on again. The following functions are available in test mode.

■ Key operation

Key	Function	Display
[S]	Shifts to Panel tuning mode	-
[A]	Low transmit power	"L" appears
[B]	MSK 1200bps and 2400bps	2400bps: <input checked="" type="checkbox"/> icon appears
[C]	Test signaling CH up	Signaling No.
[Selector]	Test frequency CH up/down	Channel No.
[Side1]	Squelch on/off	🔊
[Side2]	Narrow/Wide 5k/Wide 4k	Narrow: "N" Wide 5k: "W" Wide 4k: "S"
[PTT]	Transmit	-
[0] to [9] and [#], [*]	Use as the DTMF keypad. If a key is pressed during transmission, the DTMF corresponding to the key that was presses is sent.	-
[AUX]	Segment check	All segment appears

Note:

- If a [S], [A], [B], [C] key is pressed during transmission, the DTMF corresponding to the key that was pressed is sent.

• LED indicator

- Red LED Lights during transmission. Blinks at the low battery voltage warning.
- Green LED Lights when there is carrier.

• Test signaling

No.	RX	TX
1	None	None
2	None	100Hz Square Wave
3	Skip	Skip
4	QT: 67.0Hz	QT: 67.0Hz
5	QT: 151.4Hz	QT: 151.4Hz
6	QT: 210.7Hz	QT: 210.7Hz
7	QT: 254.1Hz	QT: 254.1Hz
8	DQT: 023N	DQT: 023N
9	DQT: 754I	DQT: 754I
10	DTMF: 159D	DTMF: 159D
11	None	DTMF Code 9
12	Skip	Skip
13	Single Tone: 979.9Hz	Single Tone: 979.9Hz
14	None	Single Tone: 1000Hz
15	5-tone: 12345 (CCIR)	5-tone: 12345 (CCIR)
16	None	MSK
17	MSK: Preamble: 0xAAAA Sync: 0x23EB Data: 0x230960C6AAAA CRC: 0xC4D7	MSK: Preamble: 0xAAAA Sync: 0x23EB Data: 0x230960C6AAAA CRC: 0xC4D7

ADJUSTMENT

Panel Tuning Mode

■ Preparations for tuning the transceiver

Before attempting to tune the transceiver, connect the unit to a suitable power supply.

Whenever the transmitter is turned, the unit must be connected to a suitable dummy load (i.e. power meter).

The speaker output connector must be terminated with a 8Ω dummy load and connected to an AC voltmeter and an audio distortion meter or a SINAD measurement meter at all times during tuning.

■ Transceiver tuning

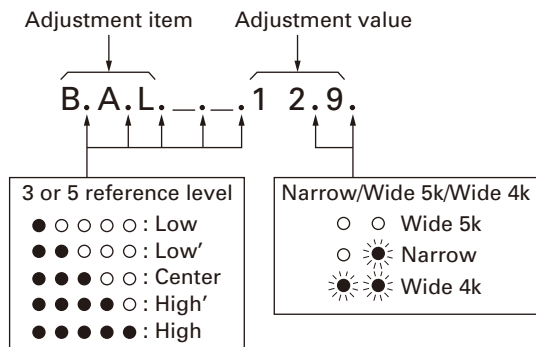
(To place transceiver in tuning mode)

Press [S] key, now in tuning mode. Use [B] key to write tuning data through tuning modes, and [Selector] to adjust tuning requirements (1 to 256 appears on LCD).

Use [C] key to select the adjustment item through tuning modes. Use [A] key to adjust 3 or 5 reference level adjustments, and use [Side2] key to switch between Wide/Narrow.

Channel appears on LCD. Set channel according to tuning requirements.

• LCD display in panel tuning mode



■ 3 or 5 reference level adjustments frequency

Tuning point	E, E4		E3, E6		E7	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
Low	440.05000	440.10000	400.05000	400.10000	380.05000	380.10000
Low'	447.55000	447.60000	407.55000	407.60000	385.05000	385.10000
Center	455.05000	455.10000	415.05000	415.10000	390.05000	390.10000
High'	462.55000	462.60000	422.55000	422.60000	395.05000	395.10000
High	469.95000	469.90000	429.95000	429.90000	399.95000	399.90000

■ Adjustment item and Display

(***: 1~256, MSK only: 1~64)

Order	Adjustment item	Display
1	Frequency	FREQ_ ***
2	High power	HPWR_ ***
3	Low power	LPWR_ ***
4	DQT balance	BAL__ ***
5	Max deviation	DEV__ ***
6	VOX 1	VX1__ ***
7	VOX 10	VX10_ ***
8	QT deviation	QT___ ***
9	DQT deviation	DQT__ ***
10	DTMF deviation	DTMF_ ***
11	MSK deviation	MSK___ **
12	Tone deviation	TONE_ ***
13	Sensitivity	SENS_ ***
14	Squelch	SQL__ ***
15	Low RSSI	LRSSI ***
16	Squelch tight	SQLT_ ***
17	High RSSI	HRSSI ***
18	Battery detection	BATT_ ***

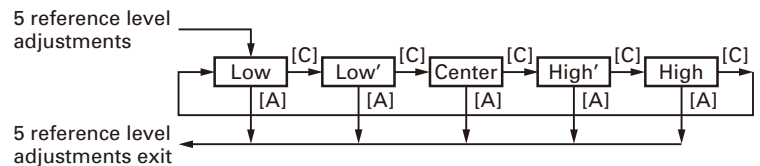
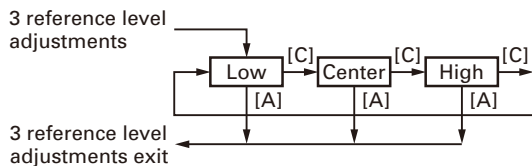
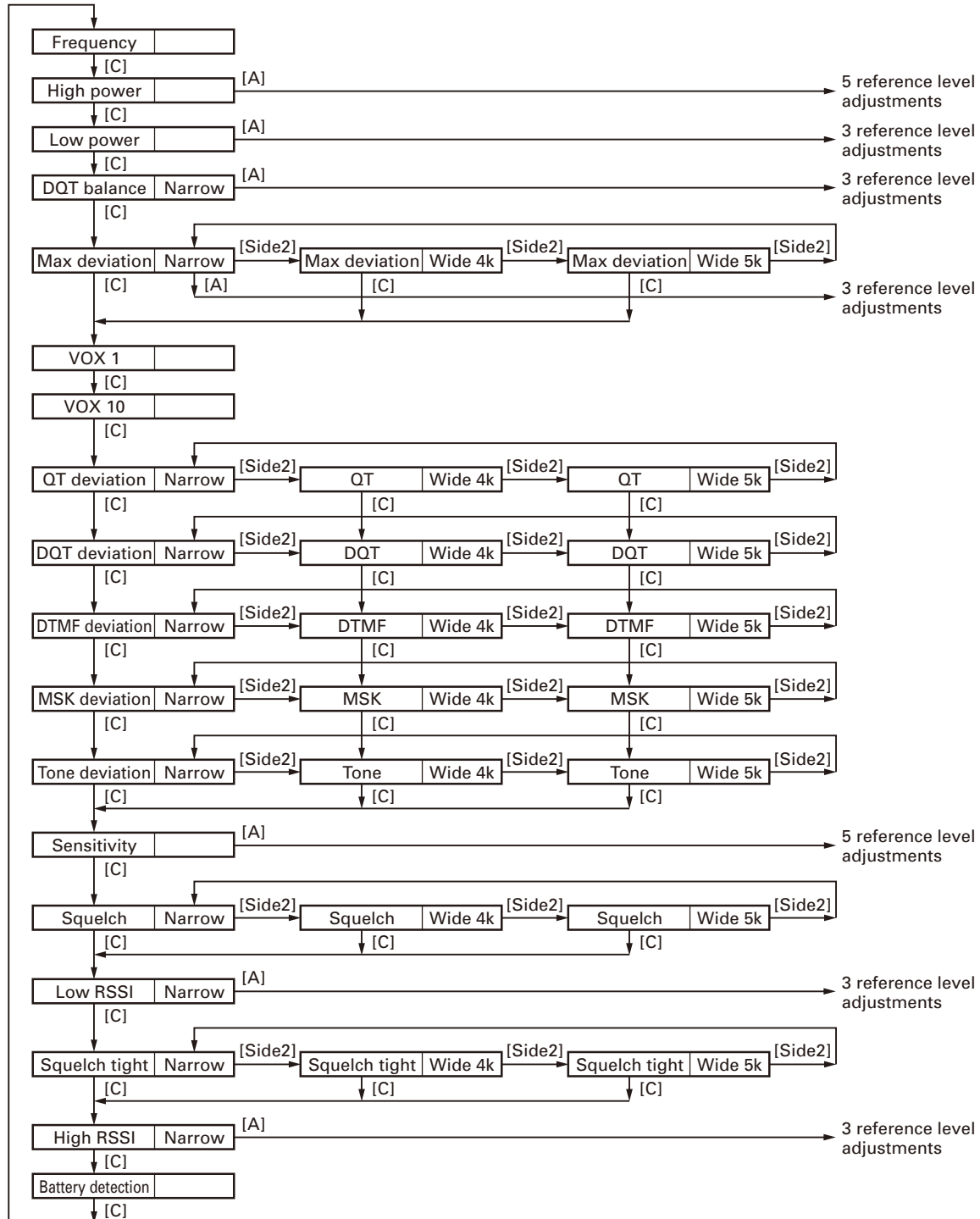
■ Key operation

Key	Function	
	Push	Hold (1 second)
[S]	End of panel tuning mode	-
[A]	To enter 3 or 5 reference level adjustments	-
[B]	Writes the adjustment value	-
[C]	Go to next adjustment item	Back to last adjustment item
[Selector]	Adjustment value up/down	
[Volume]	Volume level up/down	
[Side1]	Squelch on/off	-
[Side2]	Selects Narrow, Wide	-
[AUX]	All segment appears	-

ADJUSTMENT

Flow chart

Note: Wide 4k is E and E4 types only



ADJUSTMENT

Test Equipment Required for Alignment

Test Equipment	Major Specifications	
1. Standard Signal Generator (SSG)	Frequency Range Modulation Output	380 to 520MHz Frequency modulation and external modulation -127dBm/0.1μV to greater than -47dBm/1mV
2. Power Meter	Input Impedance Operation Frequency Measurement Capability	50Ω 380 to 520MHz or more Vicinity of 10W
3. Deviation Meter	Frequency Range	380 to 520MHz
4. Digital Volt Meter (DVM)	Measuring Range Input Impedance	10mV to 10V DC High input impedance for minimum circuit loading
5. Oscilloscope		DC through 30MHz
6. High Sensitivity Frequency Counter	Frequency Range Frequency Stability	10Hz to 1000MHz 0.2ppm or less
7. Ammeter		5A
8. AF Volt Meter (AF VTVM)	Frequency Range Voltage Range	50Hz to 10kHz 1mV to 10V
9. Audio Generator (AG)	Frequency Range Output	50Hz to 5kHz or more 0 to 1V
10. Distortion Meter	Capability Input Level	3% or less at 1kHz 50mV to 10Vrms
11. 8Ω Dummy Load		Approx. 8Ω, 3W
12. Regulated Power Supply		5V to 10V, approx. 5A Useful if ammeter equipped

■ Antenna Connector Adapter

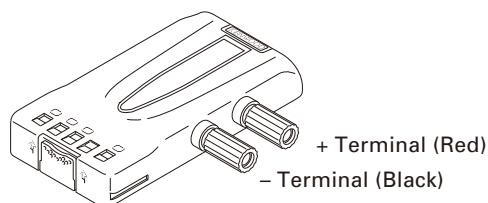
The antenna connector of this radio uses an SMA terminal. Use an antenna connector adapter [SMA(f) – BNC(f) or SMA(f) – N(f)] for adjustment. (The adapter is not provided as an option, so buy a commercially-available one.)

■ Battery Jig (W05-0909-00)

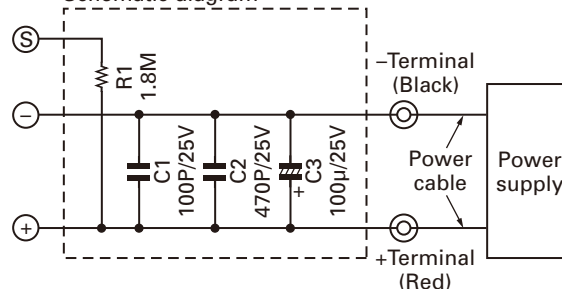
Connect the power cable properly between the battery jig installed in the transceiver and the power supply, and be sure output voltage and the power supply polarity prior to switching the power supply ON, otherwise over voltage and reverse connection may damage the transceiver, or the power supply or both.

When using the battery jig in user mode, the transceiver assumes that a lithium-ion battery pack is attached to the transceiver. In adjustment mode, battery type detection is not performed.

Note: When using the battery jig, you must measure the voltage at the terminals of the battery jig. Otherwise, a slight voltage drop may occur within the power cable, between the power supply and the battery jig, especially while the transceiver transmits.



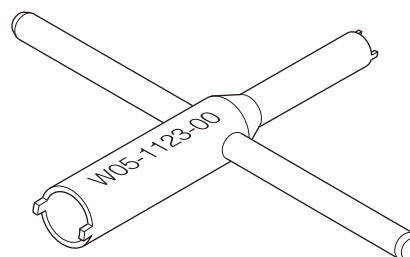
Schematic diagram




■ Nut wrench

In order to turn the volume nut and the channel selector nut, use a recommendation tool.

KENWOOD part No. : W05-1123-00



ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks		
		Test-equipment	Unit	Terminal	Unit	Parts	Method			
6. DQT balance adjust • Narrow	1) Adj item: [BAL_ _] Adjust: [***.] Deviation meter filter LPF: 3kHz HPF: OFF 2) Adj item: [B.AL_ _] → [B.A.L_ _] → [B.A.L_ _] Adjust: [***.] PTT: ON	Deviation meter Oscilloscope AG AF VTVM	Panel	ANT SP/MIC	Panel	Selector knob	Make the demodulation waves into square waves.	<p>These 2 peaks to the same level</p> 		
7. Max DEV adjust • Narrow	1) Adj item: [DEV_ _] Adjust: [***.] AG: 1kHz/75mV at MIC terminal Deviation meter filter LPF: 15kHz HPF: OFF 2) Adj item: [D.EV_ _] → [D.E.V_ _] → [D.E.V_ _] Adjust: [***.] PTT: ON								2.20kHz (According to the larger +, -)	±50Hz
• Wide 4k	3) Adj item: [DEV_ _] Adjust: [**.*.] PTT: ON								3.50kHz (According to the larger +, -)	±50Hz
• Wide 5k	4) Adj item: [DEV_ _] Adjust: [***] PTT: ON								4.40kHz (According to the larger +, -)	±50Hz
8. MIC sensitivity check	[Panel test mode] 1) CH-Sig: 1-1 AG: 1kHz/15.0mV at MIC terminal PTT: ON						Check	1.3~1.8kHz (Narrow) 1.9~2.9kHz (Wide 4k) 2.5~3.5kHz (Wide 5k)		
9. VOX1 adjust	1) Adj item: [VOX1_] Adjust: [***] AG: 1kHz/150mV at MIC terminal	AG	Panel	SP/MIC	Panel		After apply signal from AG, press [B] key that numeric will be stored in memory.			
10. VOX10 adjust	1) Adj item: [VOX10] Adjust: [***] AG: 1kHz/2mV at MIC terminal									
11. QT deviation adjust • Narrow	1) Remove the panel tuning cable assembly from the universal connector. Adj item: [QT_ _ _] Adjust: [***.] Deviation meter filter LPF: 3kHz HPF: OFF PTT: ON	Power meter Deviation meter Oscilloscope AG AF VTVM	Panel	ANT SP/MIC	Panel	Selector knob	0.35kHz	±40Hz		
• Wide 4k	2) Adj item: [QT_ _ _] Adjust: [**.*.] PTT: ON								0.60kHz	±40Hz
• Wide 5k	3) Adj item: [QT_ _ _] Adjust: [***] PTT: ON								0.75kHz	±40Hz

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks	
		Test-equipment	Unit	Terminal	Unit	Parts	Method		
12. DQT balance adjust • Narrow	1) Adj item: [DQT_ _] Adjust: [***.] Deviation meter filter LPF: 3kHz HPF: OFF PTT: ON	Power meter Deviation meter Oscilloscope AG AF VTVM	Panel	ANT SP/MIC	Panel	Selector knob	0.35kHz	±40Hz	
	• Wide 4k						2) Adj item: [DQT_ _] Adjust: [**.*.] PTT: ON	0.60kHz	±40Hz
	• Wide 5k						3) Adj item: [DQT_ _] Adjust: [***] PTT: ON	0.75kHz	±40Hz
13. DTMF deviation adjust • Narrow	1) Adj item: [DTMF_] Adjust: [***.] Deviation meter filter LPF: 15kHz HPF: OFF PTT: ON						1.25kHz	±0.1kHz	
	• Wide 4k						2) Adj item: [DTMF_] Adjust: [**.*.] PTT: ON	2.0kHz	±0.1kHz
	• Wide 5k						3) Adj item: [DTMF_] Adjust: [***] PTT: ON	2.5kHz	±0.1kHz
14. MSK deviation adjust • Narrow	1) Adj item: [MSK_ _] Adjust: [***.] Deviation meter filter LPF: 15kHz HPF: OFF PTT: ON						1.5kHz	±0.1kHz	
	• Wide 4k						2) Adj item: [MSK_ _] Adjust: [**.*.] PTT: ON	2.4kHz	±0.1kHz
	• Wide 5k						3) Adj item: [MSK_ _] Adjust: [***] PTT: ON	3.0kHz	±0.1kHz
15. TONE deviation adjust • Narrow	1) Adj item: [TONE_] Adjust: [***.] Deviation meter filter LPF: 15kHz HPF: OFF PTT: ON						1.5kHz	±0.1kHz	
	• Wide 4k						2) Adj item: [TONE_] Adjust: [**.*.] PTT: ON	2.4kHz	±0.1kHz
	• Wide 5k						3) Adj item: [TONE_] Adjust: [***] PTT: ON	3.0kHz	±0.1kHz

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
16. BATT detection writing	1) Adj item: [BATT_] Adjust: [***] PTT: ON	Power meter DVM	Panel	ANT BATT terminal	Panel		After pressing the PTT switch, confirm that one predetermined numeric in the range 1 to 256 appears and then press [B] key. That numeric will be stored in memory.	BATT terminal voltage: 5.9V
17. BATT detection check	[Panel test mode] 1) CH-Sig: 1-1 BATT terminal voltage: 7.5V PTT: ON						Check	The transceiver can transmit without causing the LED to blink.
	2) BATT terminal voltage: 5.7V PTT: ON							The transceiver should not transmit and LED blinking.

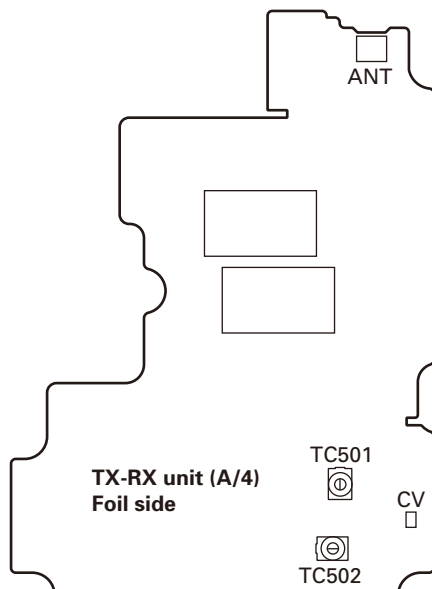
Receiver Section (Note: The market code of the E3, E6 and E7 do not perform "Wide 4k" adjustment)

Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Sensitivity adjust	1) Adj item: [SENS_] Adjust: [***] 2) Adj item: [S.ENS_] → [S.E.N.S_] → [S.E.N.S_] → [S.E.N.S_] → [S.E.N.S_] → [S.E.N.S_] Adjust: [***] SSG output: -103dBm (1.58μV) (MOD: 1kHz/±1.5kHz)	SSG AF VTVM Oscilloscope	Panel	ANT SP/MIC	Panel	Selector knob	Adjust for RSSI MAX	Rotate the selector knob and increase the adjustment value starting from "1" to obtain RSSI MAX.
2. Sensitivity check	[Panel test mode] 1) CH-Sig: 1-1 SSG output Wide 5k: -117dBm (0.32μV) (MOD: 1kHz/±3.0kHz) Wide 4k: -117dBm (0.32μV) (MOD: 1kHz/±2.4kHz) Narrow: -115dBm (0.4μV) (MOD: 1kHz/±1.5kHz)						Check	13dB SINAD or more
3. Squelch (Preset) adjust • Narrow	1) Adj item: [SQL_] Adjust: [***] SSG output: -118dBm (0.28μV) (MOD: 1kHz/±1.5kHz)				Panel	Selector knob	After input signal from SSG, press [B] key. That numeric will be stored in memory.	After adjusting SQL, check SQL open/close. SSG -116dBm: Open SSG OFF: Close
	• Wide 4k 2) Adj item: [SQL_] Adjust: [***] SSG output: -118dBm (0.28μV) (MOD: 1kHz/±2.4kHz)							
	• Wide 5k 3) Adj item: [SQL_] Adjust: [***] SSG output: -118dBm (0.28μV) (MOD: 1kHz/±3.0kHz)							

ADJUSTMENT

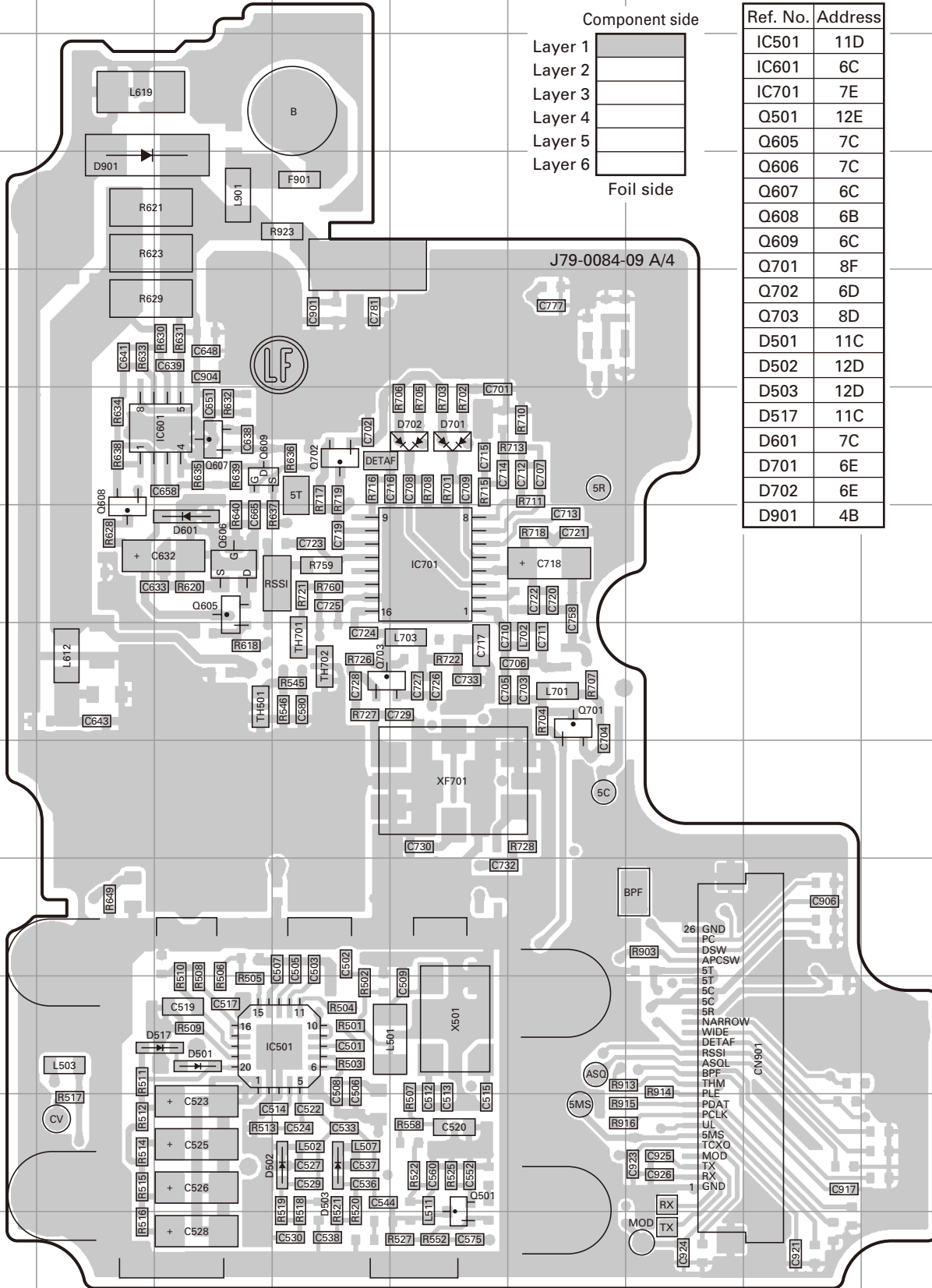
Item	Condition	Measurement			Adjustment			Specifications / Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
4. Low RSSI adjust • Narrow	1) Adj item: [LRSSI] Adjust: [***.] SSG output: -118dBm (0.28μV) (MOD: 1kHz±1.5kHz)	SSG AF VTVM Oscilloscope	Panel	ANT	Panel	Selector knob	After input signal from SSG, press [B] key. That numeric will be stored in memory.	
	2) Adj item: [L.RSSI] → [L.R.S.SI] → [L.R.S.S.I.] Adjust: [***.]			SP/MIC				
5. Squelch (Tight) adjust • Narrow • Wide 4k • Wide 5k	1) Adj item: [SQLT_] Adjust: [***.] SSG output: -113dBm (0.5μV) (MOD: 1kHz±1.5kHz)						After input signal from SSG, press [B] key. That numeric will be stored in memory.	After adjusting SQL, check SQL open/close. SSG -111dBm: Open SSG OFF: Close
	2) Adj item: [SQLT_] Adjust: [***.] SSG output: -114dBm (0.45μV) (MOD: 1kHz±2.4kHz)							
	3) Adj item: [SQLT_] Adjust: [***.] SSG output: -114dBm (0.45μV) (MOD: 1kHz±3.0kHz)							
6. High RSSI adjust • Narrow	1) Adj item: [HRSSI] Adjust: [***.] SSG output: -70dBm (70.8μV) (MOD: 1kHz±1.5kHz)						After input signal from SSG, press [B] key. That numeric will be stored in memory.	
	2) Adj item: [H.RSSI] → [H.R.S.SI] → [H.R.S.S.I.] Adjust: [***.]							

Adjustment Points



TK-3170 PC BOARD

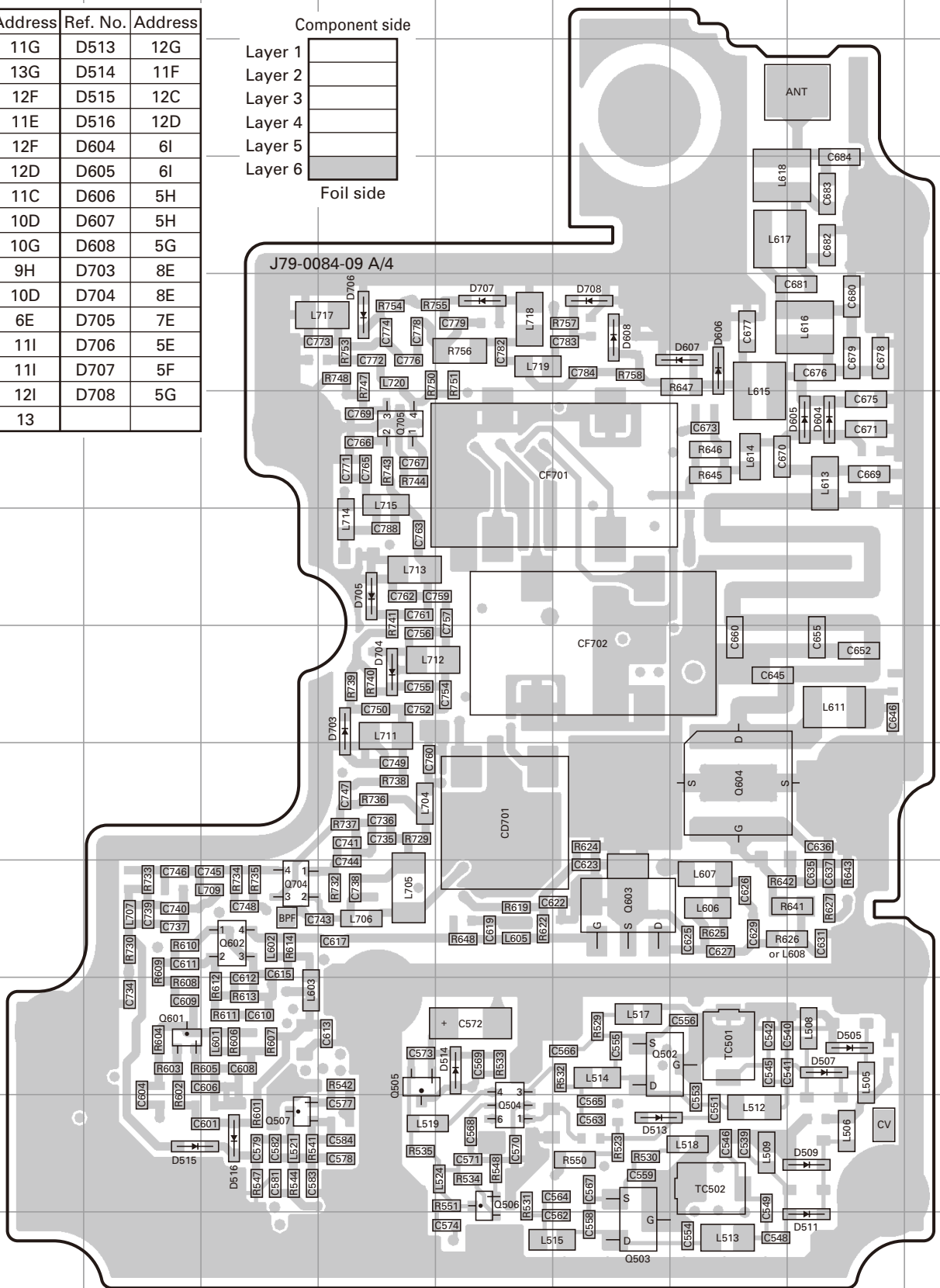
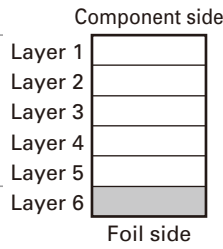
TX-RX UNIT (X57-7012-XX) (A/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 A/4)



PC BOARD TK-3170

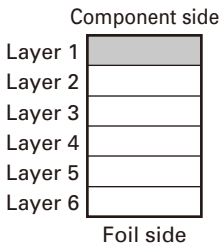
TX-RX UNIT (X57-7012-XX) (A/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7 Foil side view (J79-0084-09 A/4)

Ref. No.	Address	Ref. No.	Address
Q502	11G	D513	12G
Q503	13G	D514	11F
Q504	12F	D515	12C
Q505	11E	D516	12D
Q506	12F	D604	6I
Q507	12D	D605	6I
Q601	11C	D606	5H
Q602	10D	D607	5H
Q603	10G	D608	5G
Q604	9H	D703	8E
Q704	10D	D704	8E
Q705	6E	D705	7E
D505	11I	D706	5E
D507	11I	D707	5F
D509	12I	D708	5G
D511	13		



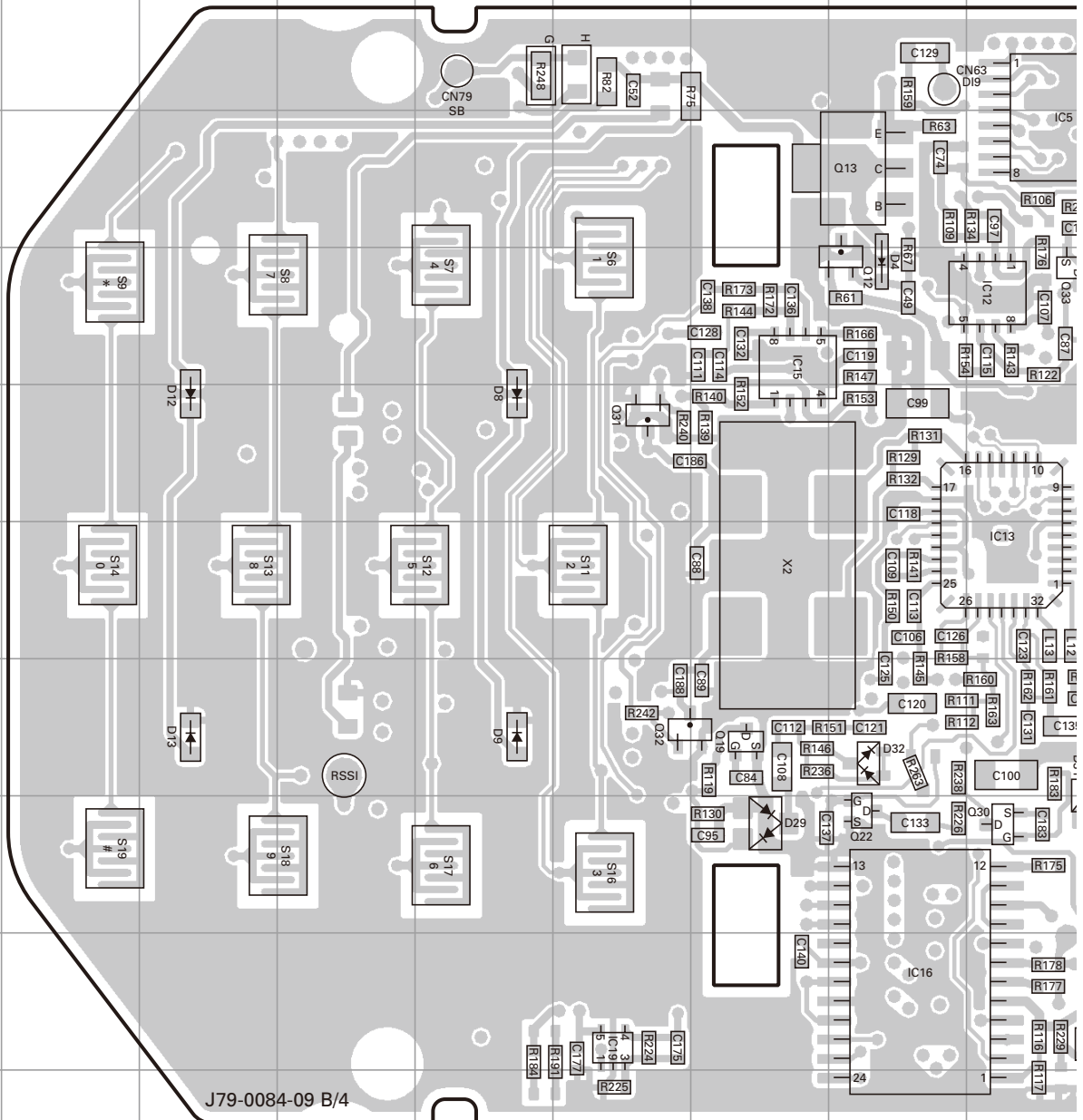
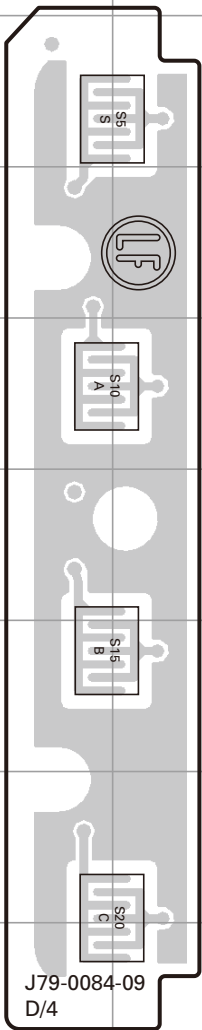
TK-3170 PC BOARD

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC4	6M	IC17	12K	Q23	8N	Q32	10G	D12	8D
IC5	6J	IC18	8M	Q24	7M	Q33	7J	D13	10D
IC11	8K	IC19	12G	Q25	12K	Q35	9M	D29	11H
IC12	7J	Q12	7I	Q26	12K	D4	7I	D30	10K
IC13	9J	Q13	6I	Q27	9M	D5	8N	D31	10J
IC14	9K	Q19	10H	Q28	9N	D7	10N	D32	10I
IC15	7H	Q21	10K	Q30	11J	D8	8F	D33	12N
IC16	12I	Q22	11I	Q31	8G	D9	10F		



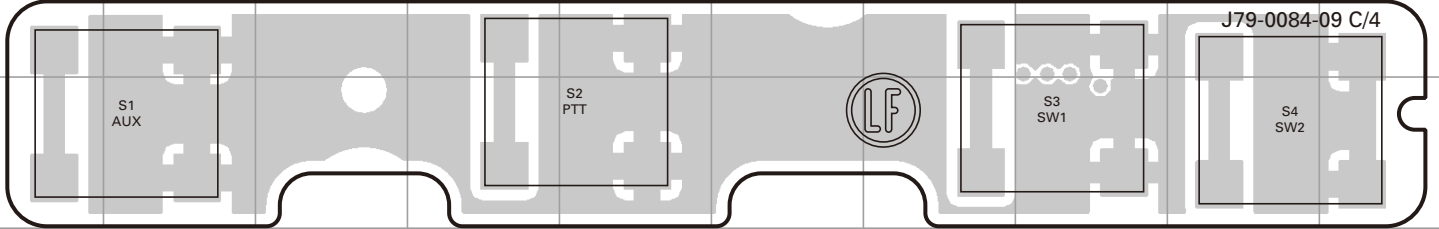
TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 B/4)

(D/4)

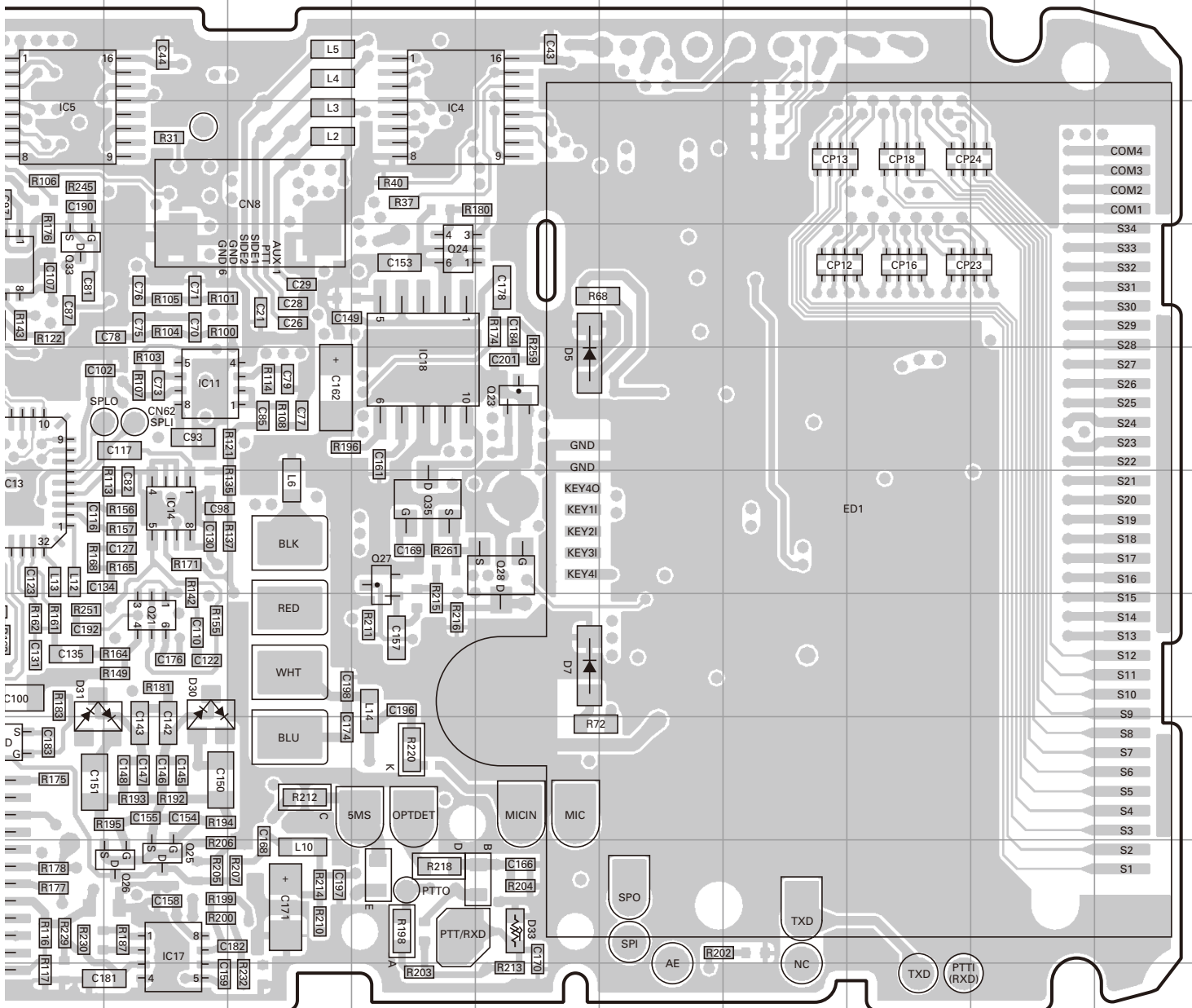


PC BOARD TK-3170

TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 C/4)

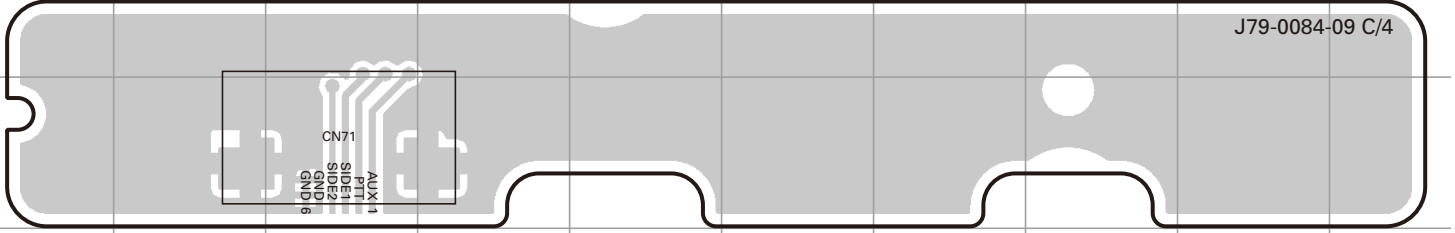


TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 B/4)

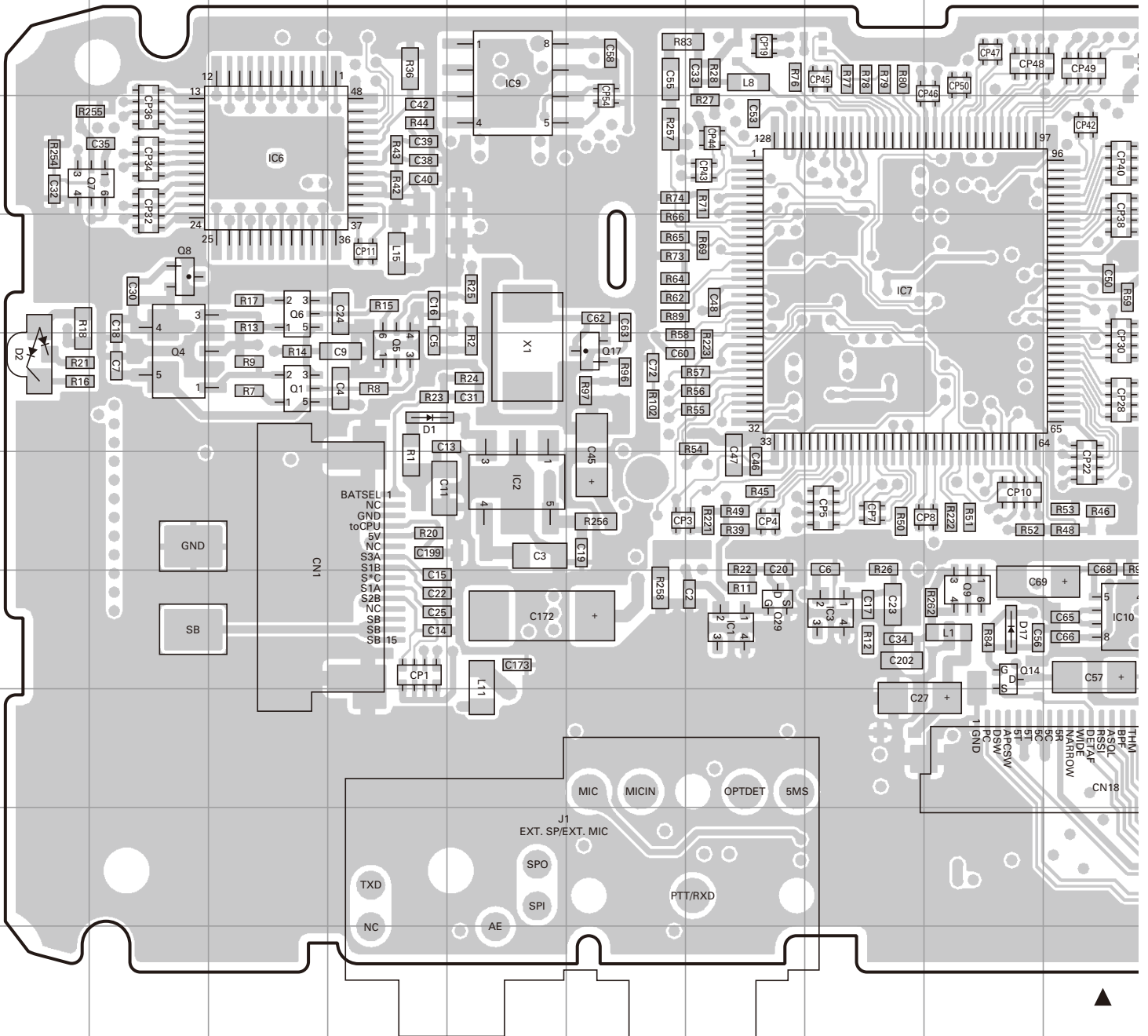


TK-3170 PC BOARD

TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Foil side view (J79-0084-09 C/4)

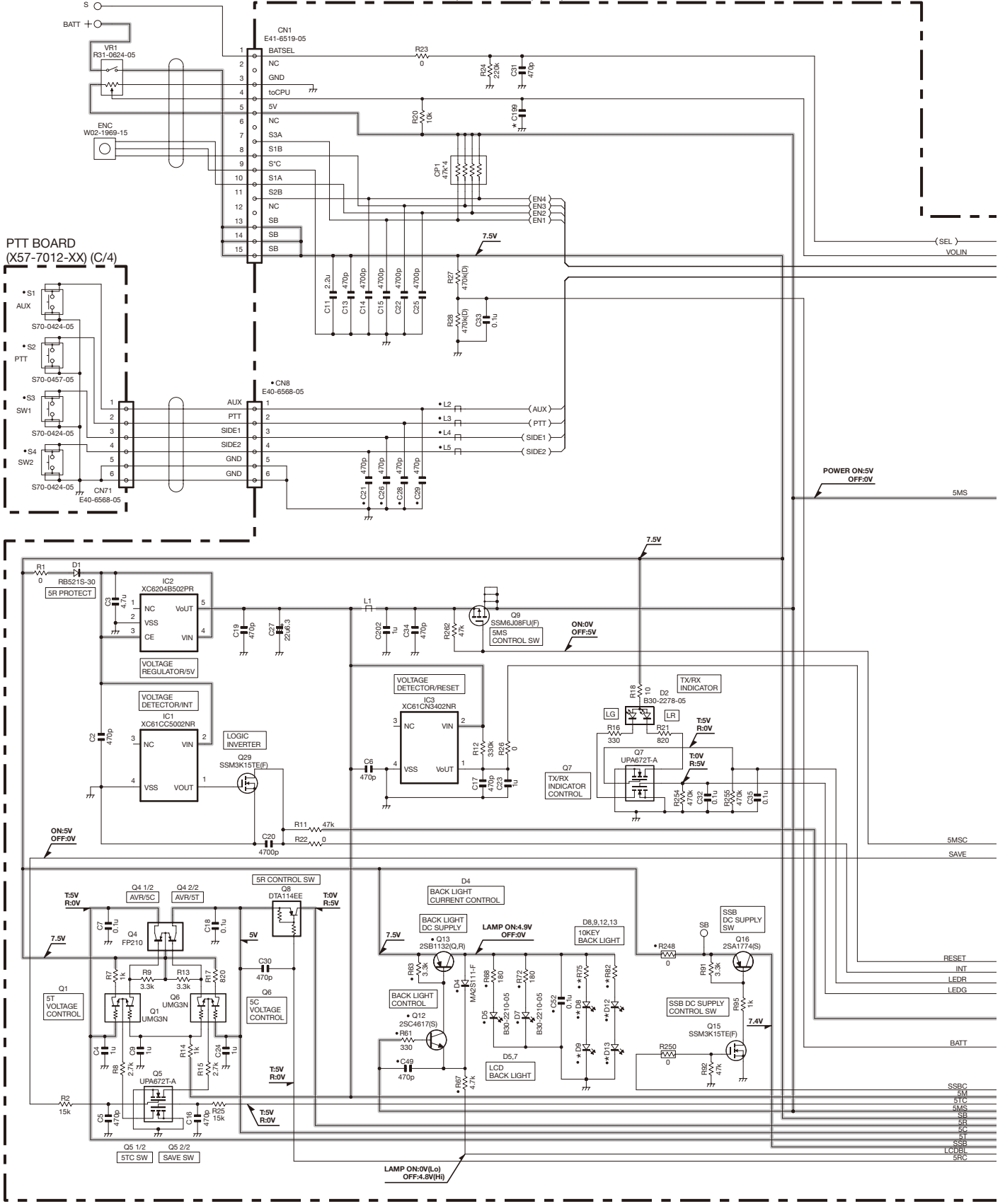


TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Foil side view (J79-0084-09 B/4)



TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT : CONTROL SECTION (X57-7012-XX) (B/4)



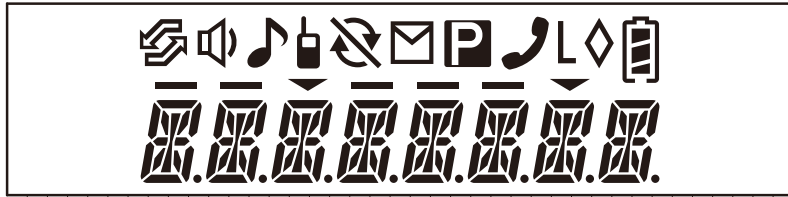
Note : The components marked with a dot (•) are parts of layer 1.

X57-7012-XX (B/4)	D8	D9	D12	D13	R75	R82	C199
-71 E 16key	B30-2050-05	B30-2050-05	B30-2050-05	B30-2050-05	390	390	0.1u
-72 E3 16key	B30-2050-05	B30-2050-05	B30-2050-05	B30-2050-05	390	390	NO
-73 E4 4key	NO	NO	NO	NO	NO	NO	0.1u
-74 E6 4key	NO	NO	NO	NO	NO	NO	NO
-75 E7 16key	B30-2050-05	B30-2050-05	B30-2050-05	B30-2050-05	390	390	NO

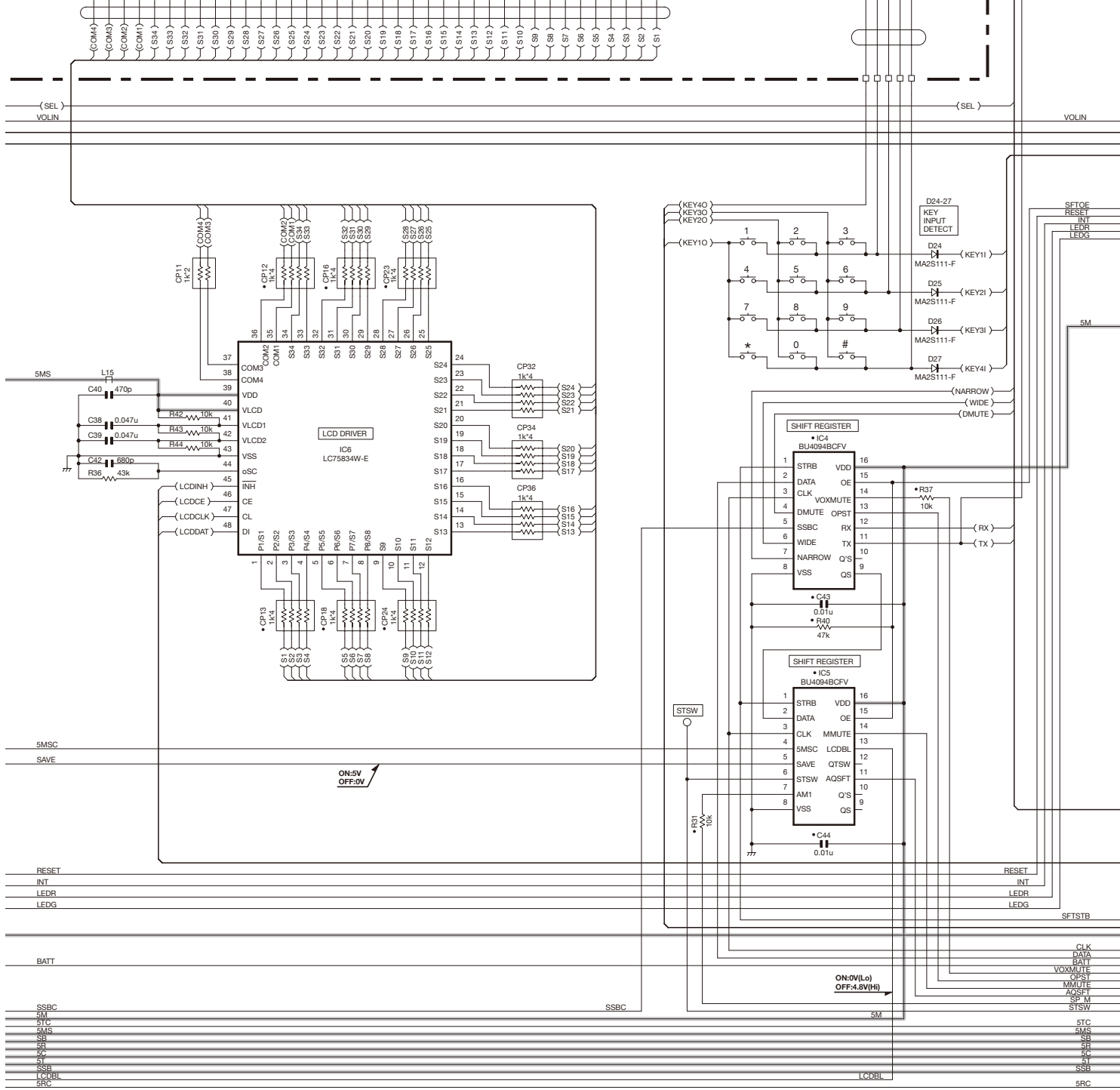
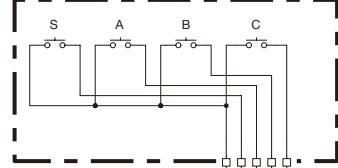
SCHEMATIC DIAGRAM TK-3170

TX-RX UNIT : CONTROL SECTION (X57-7012-XX) (B/4)

B38-0901-05

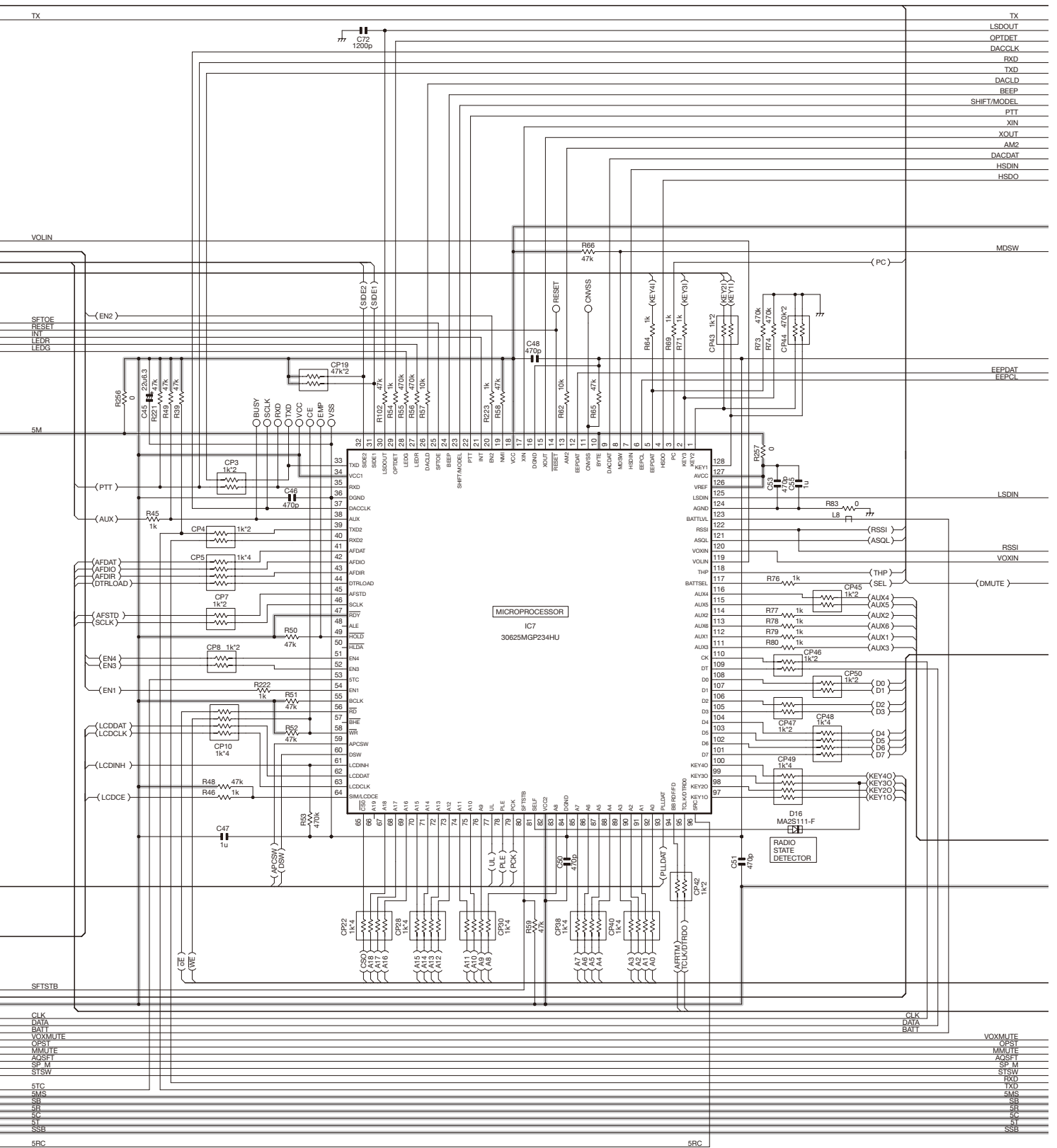


4KEY BOARD (X57-7012-XX) (D/4)



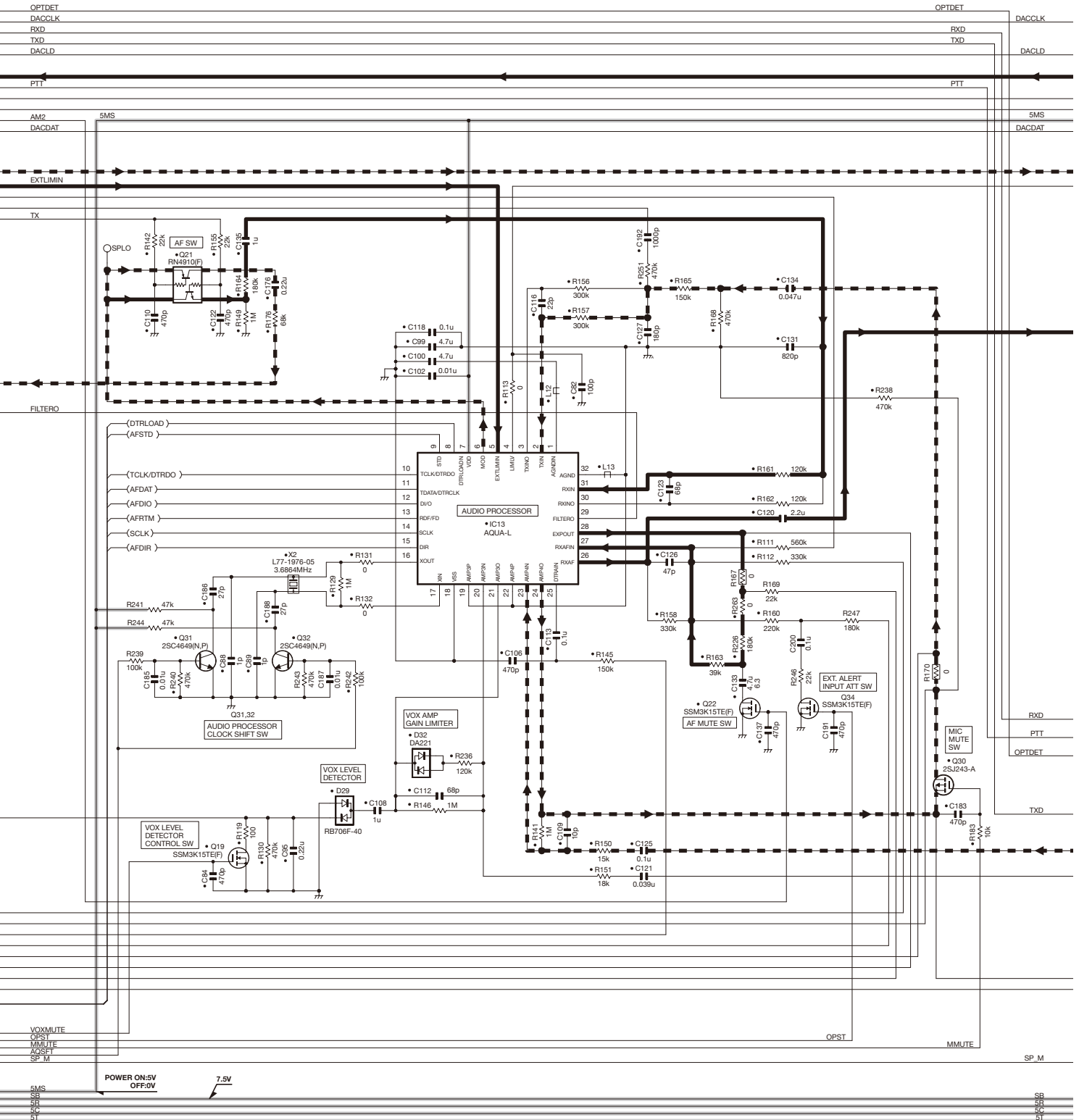
TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT : CONTROL SECTION (X57-7012-XX) (B/4)



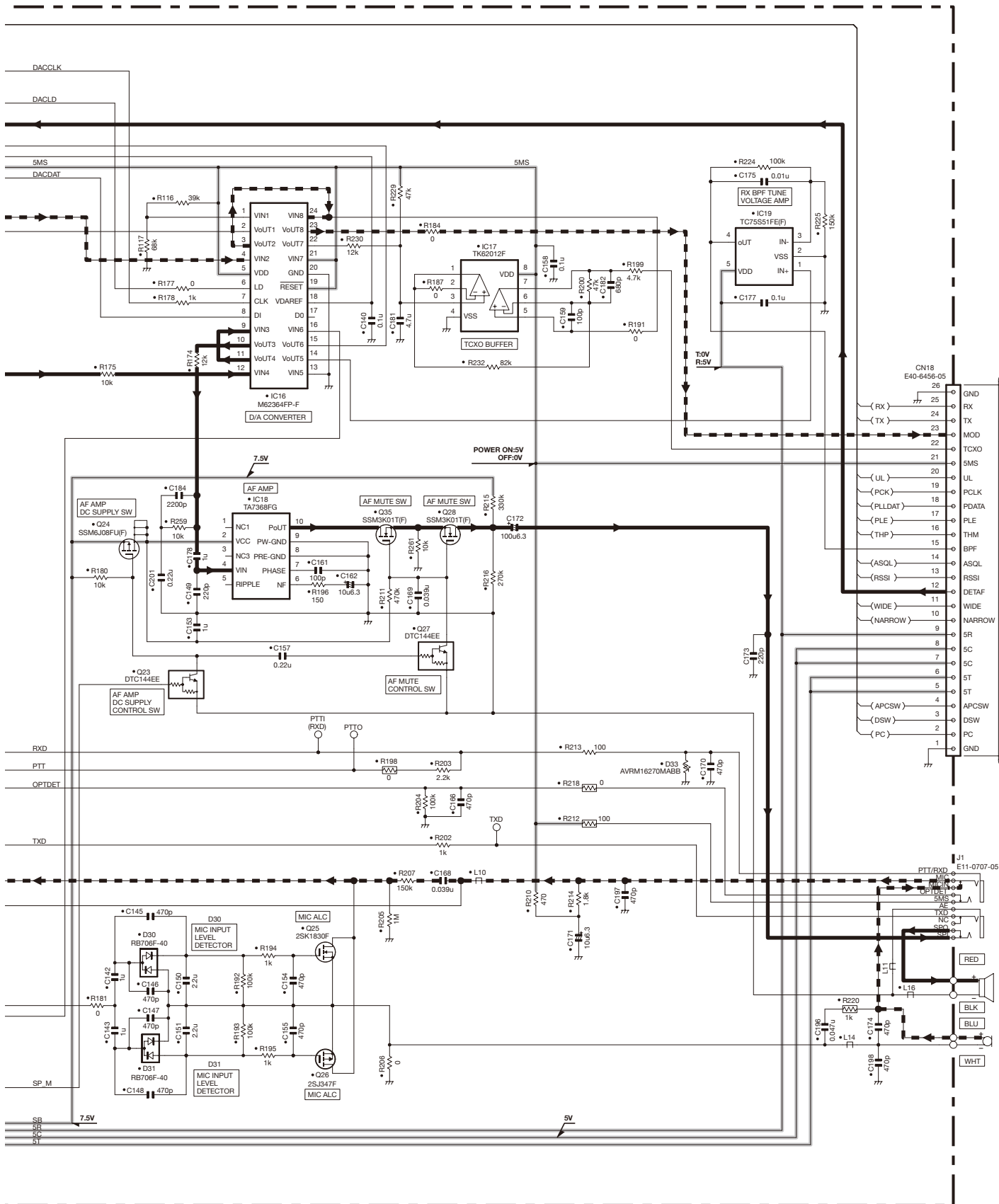
TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT : CONTROL SECTION (X57-701-XX) (B/4)



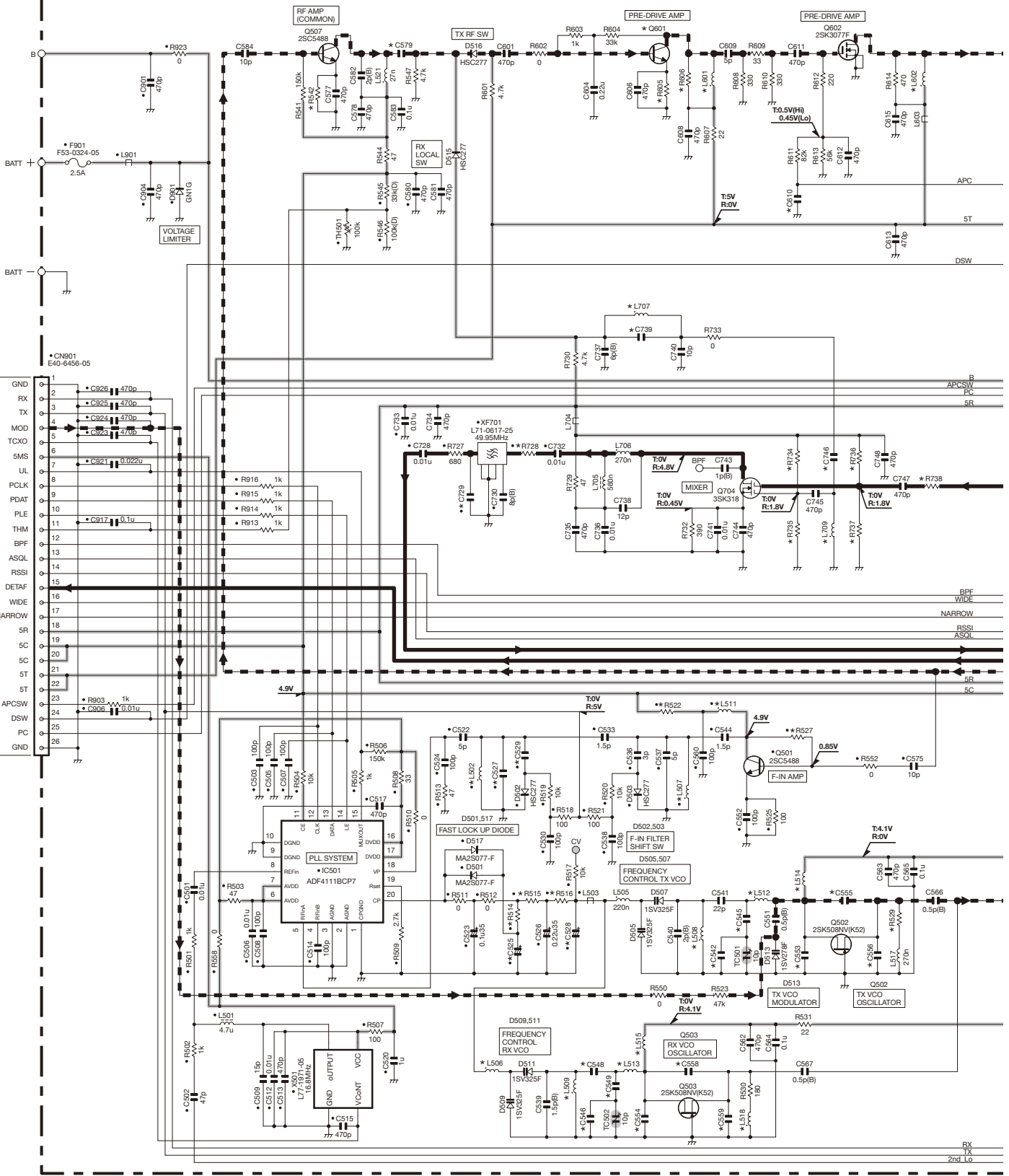
SCHEMATIC DIAGRAM TK-3170

TX-RX UNIT : CONTROL SECTION (X57-701-XX) (B/4)



TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-7012-XX) (A/4)

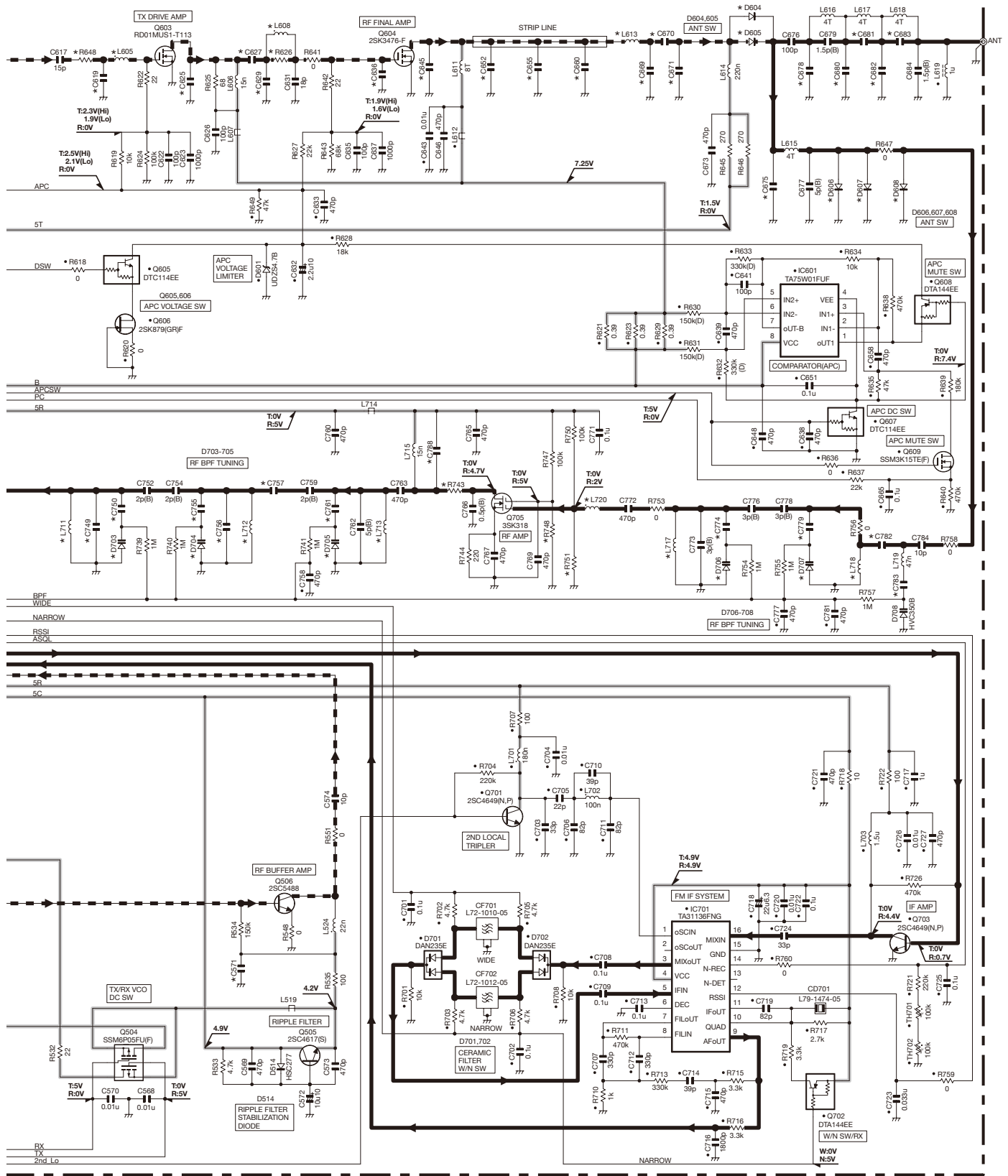


X57-7012-XX (A/4)	L502	L506	L507	L508	L509	L511	L512	L513	L514	L515	L518	L601	L602	L707	L709	R514	R515	R516	R522	R527	R529	R542	R605	R606				
-71 E	1kkey	3.3n	220n	3.3n	82n	82n	12n	18n	22n	150n	180n	150n	L40-2775-57(27n)	L40-1875-57(18n)	18n	27n	1k	560	330	22	220k	150	68	47	NO			
-73 E4	1kkey	330	56k	100k	56k	100k	12	2.2u10	C527	C528	C529	C542	C545	C546	C548	C549	C553	C554	C555	C556	C558	C559	C579	C610	C729	C746	C5C5488	
-72 E3	1kkey	100	56k	100k	56k	100k	18	1u25	8p	0.1u35	2p	1.5p	9p	1.5p	47p	8p(B)	5p(B)	4p(B)	4p(B)	4p(B)	6p(B)	9p(B)	4p(B)	NO	1p(B)	2p(B)	5p(B)	25C5488
-74 E6	4key	3.9n	270n	3.9n	220n	120n	15n	27n	33n	220n	220n	270n	L40-2775-57(27n)	L40-1875-57(18n)	18n	33n	1.5k	330	330	100	100k	180	330	100	470			
-75 E7	1kkey	3.9n	270n	3.9n	220n	120n	15n	27n	33n	220n	220n	270n	L40-2775-71(27n)	L40-1875-71(18n)	22n	47n	1k	330	0	100	100k	180	330	100	470			

X57-7012-XX (A/4)	R728	R734	R735	R736	R737	R738	C525	C527	C528	C529	C542	C545	C546	C548	C549	C553	C554	C555	C556	C558	C559	C579	C610	C729	C739	C746	Q601	
-71 E	1kkey	330	56k	100k	56k	100k	12	2.2u10	C527	C528	C529	C542	C545	C546	C548	C549	C553	C554	C555	C556	C558	C559	C579	C610	C729	C746	25C5488	
-73 E4	1kkey	100	56k	100k	56k	100k	18	1u25	8p	0.1u35	2p	1.5p	9p	1.5p	47p	8p(B)	5p(B)	4p(B)	4p(B)	6p(B)	9p(B)	4p(B)	NO	1p(B)	2p(B)	5p(B)	25C5488	
-72 E3	1kkey	100	56k	100k	56k	100k	18	1u25	8p	0.1u35	2p	1.5p	9p	1.5p	47p	8p(B)	5p(B)	4p(B)	4p(B)	6p(B)	9p(B)	4p(B)	NO	1p(B)	2p(B)	5p(B)	25C5488	
-74 E6	4key	100	56k	100k	56k	100k	18	1u25	8p	0.1u35	2p	1.5p	9p	1.5p	47p	8p(B)	5p(B)	4p(B)	4p(B)	6p(B)	9p(B)	4p(B)	NO	1p(B)	2p(B)	5p(B)	25C5488	
-75 E7	1kkey	100	100k	150k	100k	220k	47	1u25	8p	NO	2p	NO	15p	NO	33p	27p	4p(B)	5p(B)	5p(B)	6p(B)	5p(B)	8p(B)	3p(B)	470p	NO	3p(B)	3p(B)	25C5636

SCHEMATIC DIAGRAM TK-3170

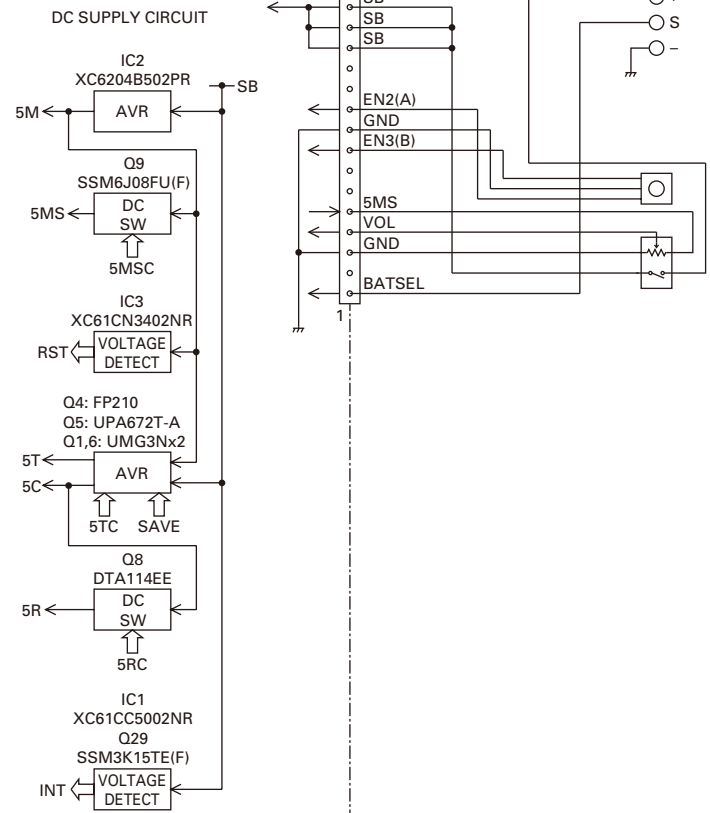
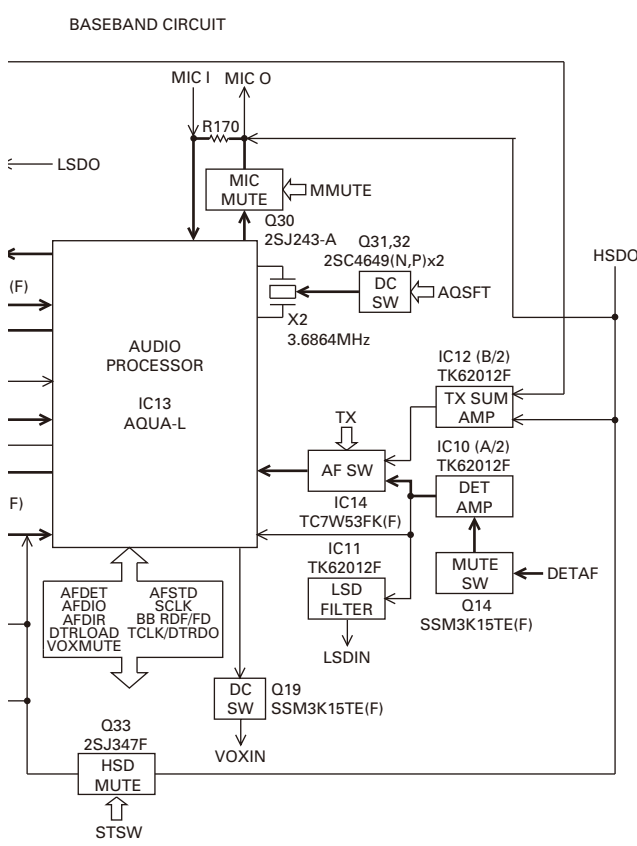
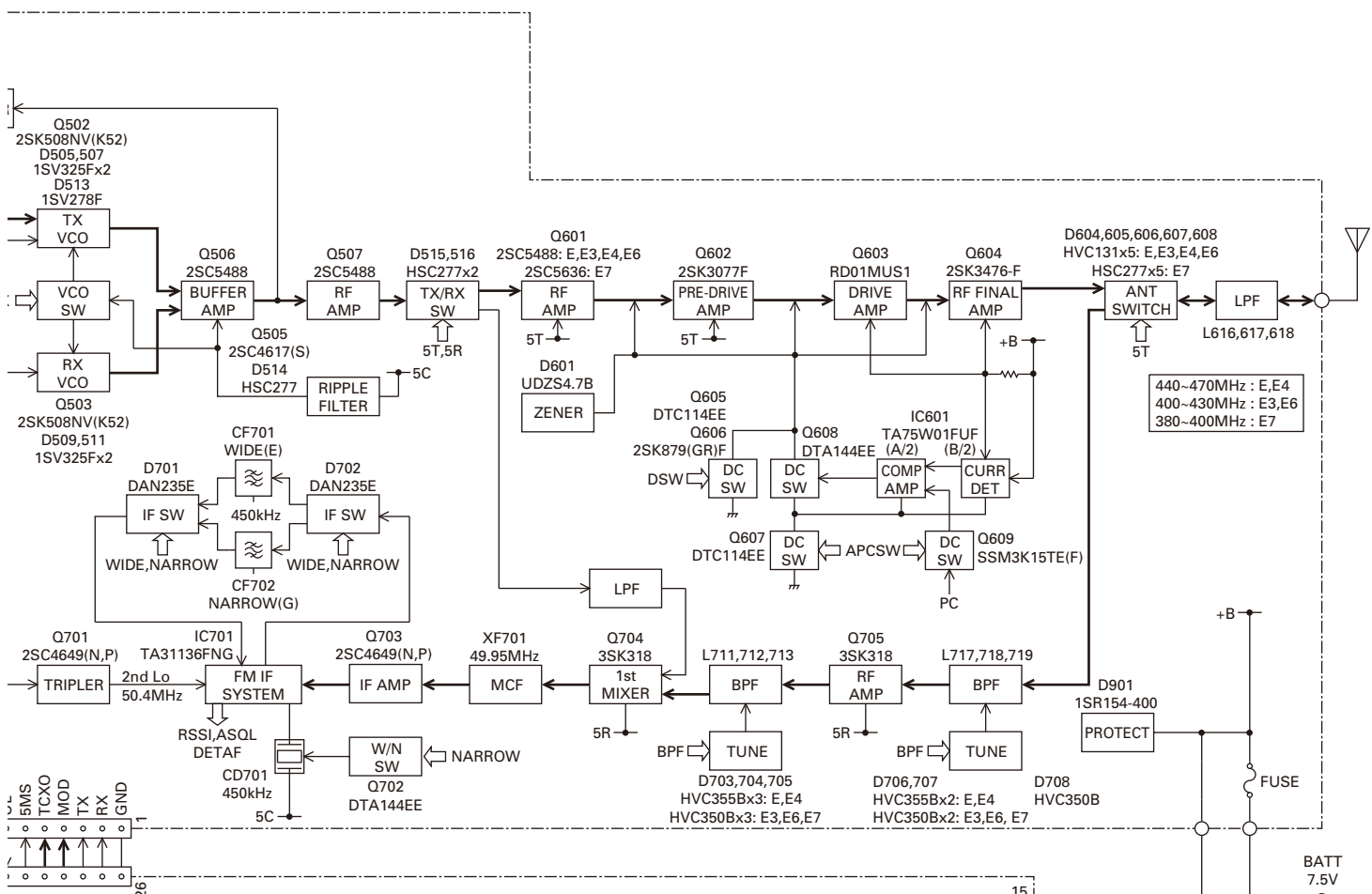
TX-RX UNIT (X57-7012-XX) (A/4)



X57-7012-XX (A/4)	D604	D605	D606	D607	D608	D703	D704	D705	D706	D707	L605	L608	L613	L711	L712	L713	L717	L718	L720	R626	R648	R743	R748	R751	
-71 E	16key	HVC131	HVC131	HVC131	HVC131	HVC355B	HVC355B	HVC355B	HVC355B	HVC355B	L40-6865-57(6.8n)	NO	5.6n	8.2n	8.2n	8.2n	8.2n	8.2n	15n	0	0	22	NO	68k	
-73 E4	4key	HVC131	HVC131	HVC131	HVC131	HVC355B	HVC355B	HVC355B	HVC355B	HVC355B	L40-6865-57(6.8n)	1.2n	5.6n	8.2n	8.2n	8.2n	8.2n	8.2n	6.8n	NO	5.6	22	820k	NO	100k
-72 E3	16key	HVC131	HVC131	HVC131	HVC131	HVC350B	HVC350B	HVC350B	HVC350B	HVC350B	L40-6865-71(6.8n)	1.2n	4.7n	10n	10n	10n	10n	10n	6.8n	NO	5.6	47	NO	100k	
-74 E6	4key	HVC131	HVC131	HVC131	HVC131	HVC350B	HVC350B	HVC350B	HVC350B	HVC350B	L40-6865-71(6.8n)	1.2n	4.7n	10n	10n	10n	10n	10n	6.8n	NO	5.6	47	NO	100k	
-75 E7	16key	HSC277	HSC277	HSC277	HSC277	HVC350B	HVC350B	HVC350B	HVC350B	HVC350B	L40-6865-71(6.8n)	1.2n	4.7n	10n	10n	10n	10n	10n	6.8n	NO	5.6	47	NO	100k	

X57-7012-XX (A/4)	C571	C619	C625	C627	C629	C636	C645	C652	C655	C660	C669	C670	C671	C675	C678	C680	C681	C682	C683	C749	C750	C755	C756	C757	C761	C774	C779	C782	C783	C788	
-71 E	16key	4key	7p	39p	15p	22p	15p	22p	NO	22p	22p	22p	22p	22p	22p	22p	22p	22p	22p	33p	33p	33p	33p	33p	33p	33p	33p	33p	33p	33p	
-73 E4	4key	NO	12p	27p	27p	18p	15p	NO	27p	15p	8p(B)	100p	5p(B)	4p(B)	4p(B)	7p(B)	3p(B)	7p(B)	2.5p(B)	4p(B)	18p	18p	5p(B)	2p(B)	18p	18p	18p	8p	8p(B)	6p(B)	
-72 E3	16key	470p	NO	12p	27p	27p	18p	15p	NO	27p	15p	8p(B)	100p	5p(B)	4p(B)	4p(B)	7p(B)	3p(B)	7p(B)	2.5p(B)	4p(B)	18p	18p	5p(B)	2p(B)	18p	18p	18p	8p	8p(B)	10p(B)
-74 E6	4key	470p	NO	12p	27p	27p	18p	15p	NO	33p	18p	7p(B)	100p	7p(B)	4p(B)	4p(B)	7p(B)	3p(B)	7p(B)	2.5p(B)	4p(B)	18p	18p	6p(B)	2p(B)	18p	18p	18p	8p	8p	15p
-75 E7	16key	470p	NO	12p	27p	27p	18p	15p	NO	33p	18p	7p(B)	100p	7p(B)	4p(B)	4p(B)	7p(B)	3p(B)	7p(B)	2.5p(B)	4p(B)	18p	18p	6p(B)	2p(B)	18p	18p	18p	8p	8p	15p

BLOCK DIAGRAM TK-3170



SPECIFICATIONS (E,E3,E4,E6 TYPE)

GENERAL

Frequency range.....	440~470MHz (E,E4)	400~430MHz (E3,E6)
Number of channels	Zone: Max. 128 per Radio	Channel: Max. 128 per Zone
Channel spacing		
E,E4.....	Wide 5k: 25kHz	Wide 4k: 20kHz Narrow: 12.5kHz
E3,E6.....	Wide 5k: 25kHz	Narrow: 12.5kHz
Battery voltage	7.5V DC \pm 20%	
Battery life (5-5-90 duty cycle, during hi-power)/Approx. hours		
KNB-25A (1200mAh).....	8	
KNB-26N (2000mAh).....	12	
KNB-35L (1950mAh).....	11	
Operating temperature range	-30°C~+60°C (-10°C~+60°C when KNB-26N/35L in use)	
Frequency stability.....	\pm 2.5ppm (-30°C~+60°C)	
Antenna impedance.....	50 Ω	
Channel frequency spread.....	30MHz	
Dimensions (W x H x D)	56 x 109 x 31.7 mm with KNB-35L battery	
(Projections not included)	56 x 109 x 37.9 mm with KNB-25A or 26N battery	
Weight (net).....	340g with battery (KNB-35L), antenna (KRA-23) and beltclip (KBH-12)	

RECEIVER (Measurements made per EN standards)

Sensitivity			
EIA 12dB SINAD	Wide 5k: 0.25 μ V	*Wide 4k: 0.25 μ V	Narrow: 0.32 μ V
EN 20dB SINAD	Wide 5k: 0.63 μ V	*Wide 4k: 0.63 μ V	Narrow: 0.70 μ V
Adjacent channel selectivity	Wide 5k: 70dB	*Wide 4k: 70dB	Narrow: 62dB
Intermodulation	65dB		
Spurious response rejection.....	70dB		
Audio output (4 Ω impedance).....	500mW with less than 5% distortion		

TRANSMITTER (Measurements made per EN standards)

RF power output.....	High: 4W	Low: 1W
Spurious emission	-36dBm \leq 1GHz	-30dBm > 1GHz
Modulation.....	Wide 5k: 16K0F3E	*Wide 4k: 14K0F3E Narrow: 11K0F3E
FM noise (EIA)	Wide 5k: 45dB	*Wide 4k: 43dB Narrow: 40dB
Audio distortion	Less than 5%	

*: E,E4 type only

E,E3,E4 and E6 type transceivers comply with the 1999/5/EU Directive.

SPECIFICATIONS (E7 TYPE)

GENERAL

Frequency range.....	380~400MHz	
Number of channels.....	Max. 128 ch's Total per Radio	
	Zone: Max. 128 per Radio	Conv. Ch: Max. 128 per Zone
Channel spacing.....	Wide: 25kHz	Narrow: 12.5kHz
Battery voltage.....	7.5V DC \pm 20%	
Battery life (5-5-90 duty cycle, during hi-power)/Approx. hours		
KNB-25A (1200mAh).....	8	
KNB-26N (2000mAh).....	12	
KNB-35L (1950mAh).....	11	
Operating temperature range.....	-30°C~+60°C (-10°C~+60°C when KNB-26N/35L in use)	
Frequency stability.....	\pm 2.5ppm (-30°C~+60°C)	
Antenna impedance.....	50 Ω	
Channel frequency spread.....	20MHz	
Dimensions (W x H x D).....	56 x 109 x 31.7 mm with KNB-35L battery	
(Projections not included)	56 x 109 x 37.9 mm with KNB-25A or 26N battery	
Weight (net).....	340g with battery (KNB-35L), antenna (KRA-23) and beltclip (KBH-12)	

RECEIVER (Measurements made per TIA/EIA-603)

Sensitivity (12dB SINAD).....	Wide: 0.25 μ V	Narrow: 0.28 μ V
Selectivity.....	Wide: 70dB	Narrow: 65dB
Intermodulation distortion.....	Wide: 65dB	Narrow: 60dB
Spurious response.....	65dB	
Audio output (4 Ω impedance).....	500mW with less than 5% distortion	

TRANSMITTER (Measurements made per TIA/EIA-603)

RF power output.....	High: 4W	Low: 1W
Spurious response.....	70dB	
FM hum & noise.....	Wide: 45dB	Narrow: 43dB
Audio distortion.....	Less than 5%	

E7 type transceivers do not comply with the 1999/5/EC Directive.

TK-3170

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Kenwood Electronics Deutschland GmbH

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Kenwood Electronics Belgium N.V.

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Kenwood Electronics France S.A.

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Kenwood Ibérica, S.A.

Bolivia, 239-08020 Barcelona, Spain

Kenwood Electronics Australia Pty. Ltd.

(A.C.N. 001 499 074)

16 Giffnock Avenue, Centrecourt Estate, North Ryde, N.S.W. 2113 Australia

Kenwood Electronics (Hong Kong) Ltd.

Unit 3712-3724, Level 37, Tower one Metroplaza, 223 Hing Fong Road,
Kwai Fong, N.T., Hong Kong

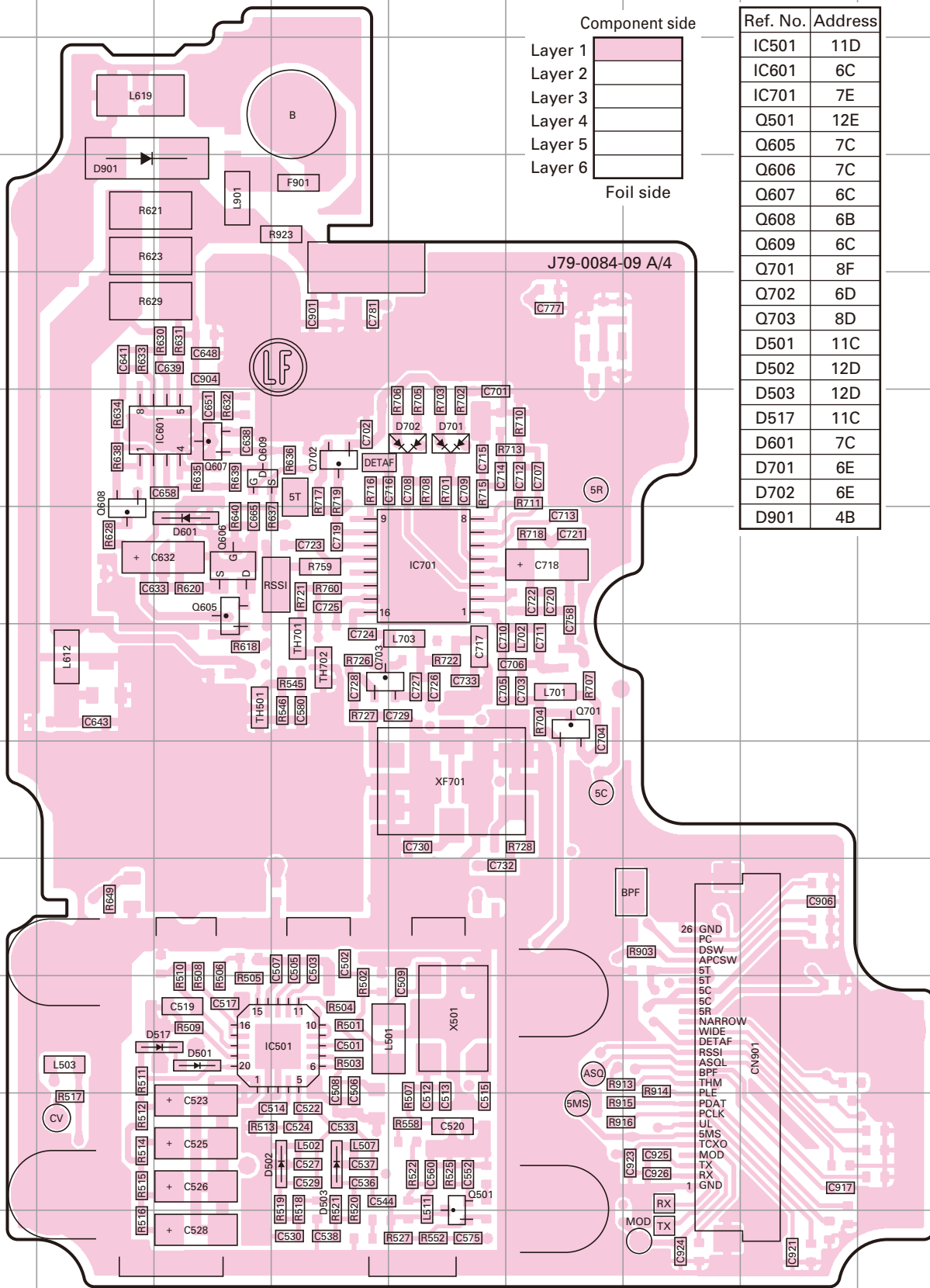
Kenwood Electronics Singapore Pte Ltd

1 Ang Mo Kio Street 63, Singapore 569110



TK-3170 PC BOARD

TX-RX UNIT (X57-7012-XX) (A/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 A/4)



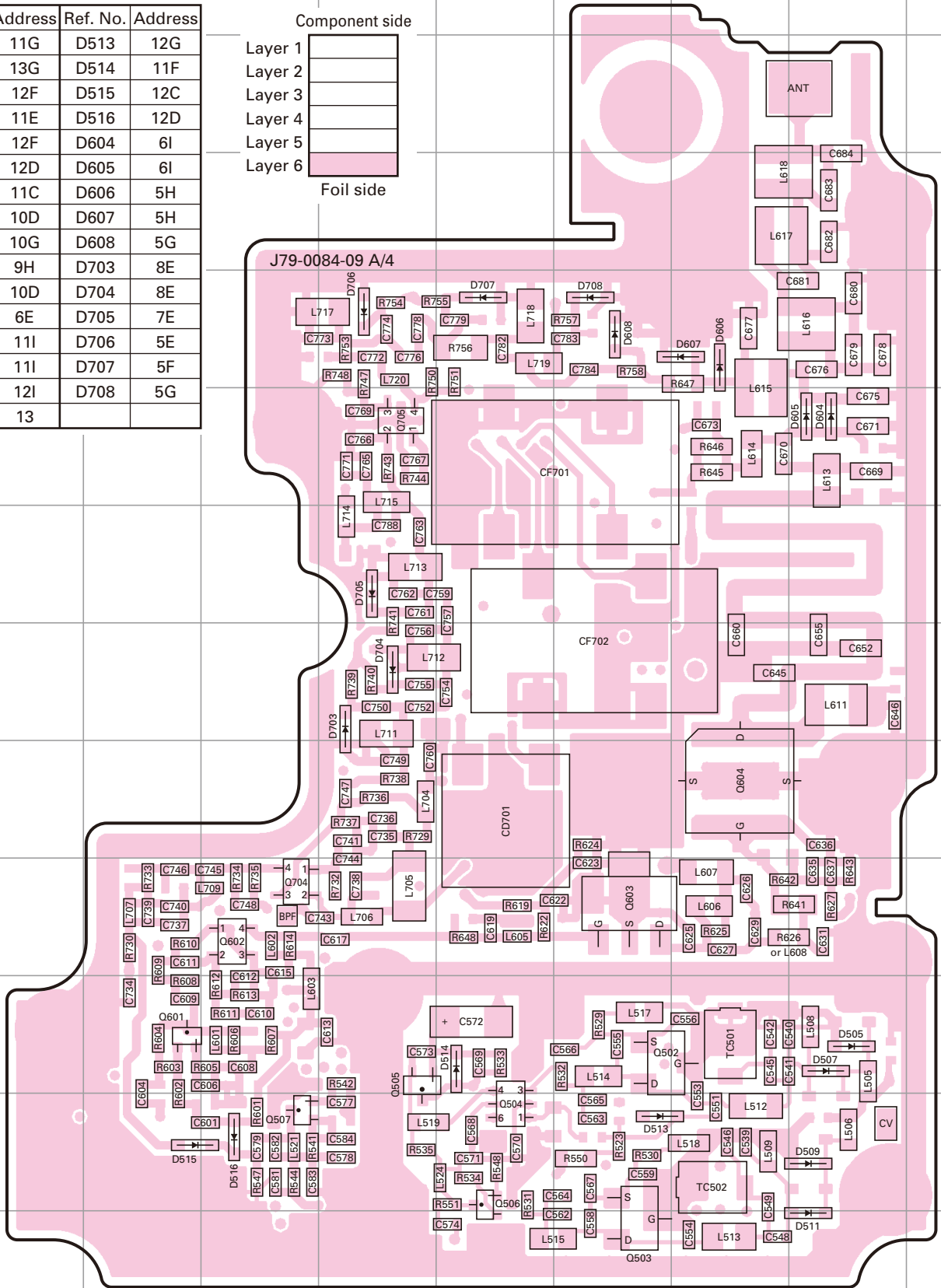
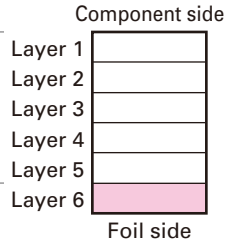
Ref. No.	Address
IC501	11D
IC601	6C
IC701	7E
Q501	12E
Q605	7C
Q606	7C
Q607	6C
Q608	6B
Q609	6C
Q701	8F
Q702	6D
Q703	8D
D501	11C
D502	12D
D503	12D
D517	11C
D601	7C
D701	6E
D702	6E
D901	4B

PC BOARD TK-3170

TX-RX UNIT (X57-7012-XX) (A/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7

Foil side view (J79-0084-09 A/4)

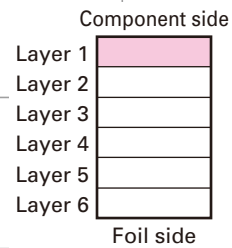
Ref. No.	Address	Ref. No.	Address
Q502	11G	D513	12G
Q503	13G	D514	11F
Q504	12F	D515	12C
Q505	11E	D516	12D
Q506	12F	D604	6I
Q507	12D	D605	6I
Q601	11C	D606	5H
Q602	10D	D607	5H
Q603	10G	D608	5G
Q604	9H	D703	8E
Q704	10D	D704	8E
Q705	6E	D705	7E
D505	11I	D706	5E
D507	11I	D707	5F
D509	12I	D708	5G
D511	13		



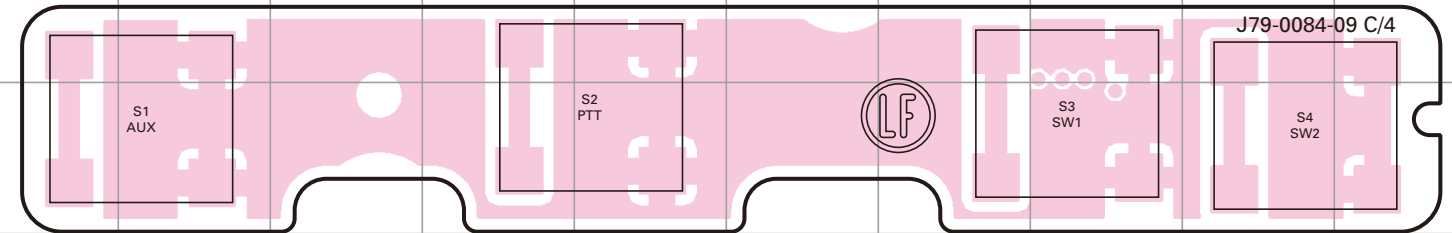
TK-3170 PC BOARD

PC BOARD TK-3170

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC4	6M	IC17	12K	Q23	8N	Q32	10G	D12	8D
IC5	6J	IC18	8M	Q24	7M	Q33	7J	D13	10D
IC11	8K	IC19	12G	Q25	12K	Q35	9M	D29	11H
IC12	7J	Q12	7I	Q26	12K	D4	7I	D30	10K
IC13	9J	Q13	6I	Q27	9M	D5	8N	D31	10J
IC14	9K	Q19	10H	Q28	9N	D7	10N	D32	10I
IC15	7H	Q21	10K	Q30	11J	D8	8F	D33	12N
IC16	12I	Q22	11I	Q31	8G	D9	10F		

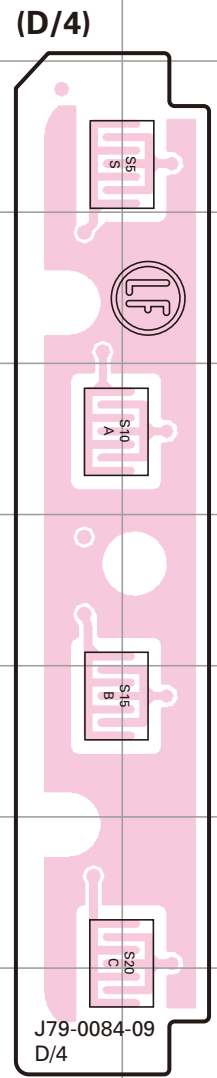
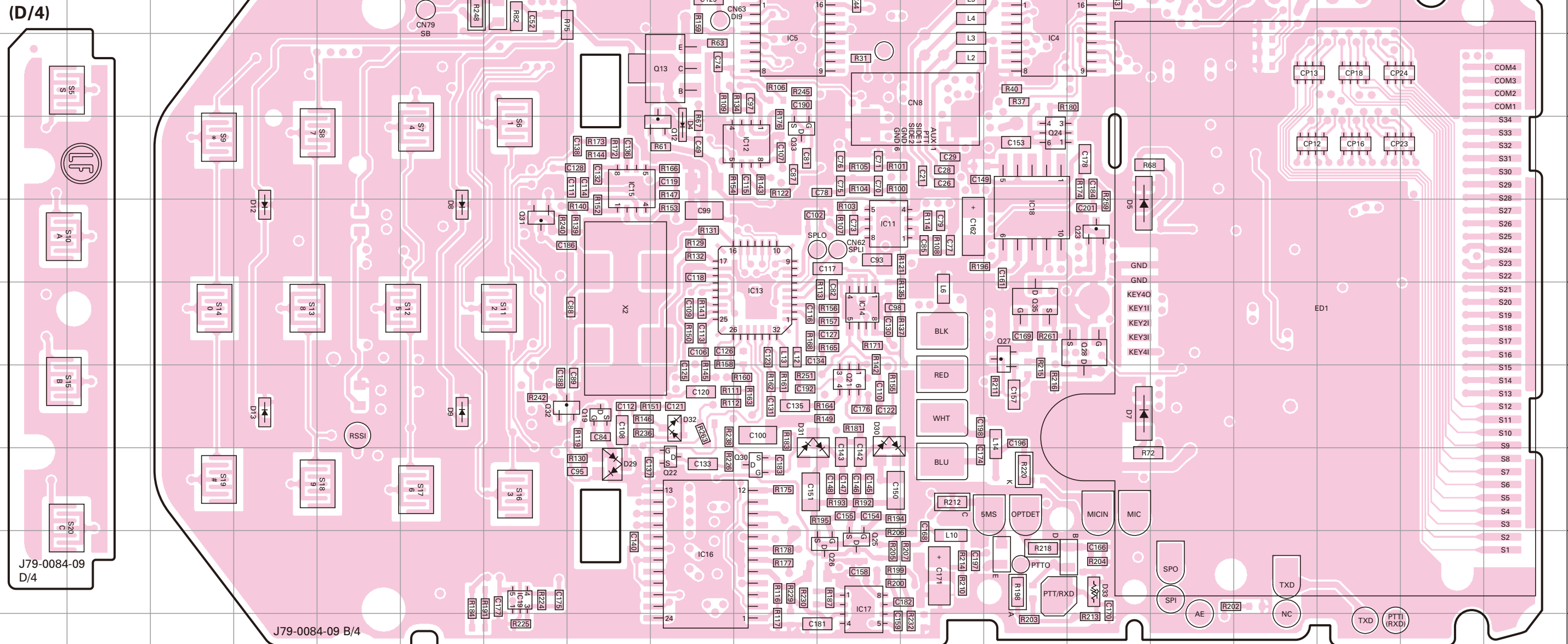


TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 C/4)



TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 B/4)

TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Component side view (J79-0084-09 B/4)

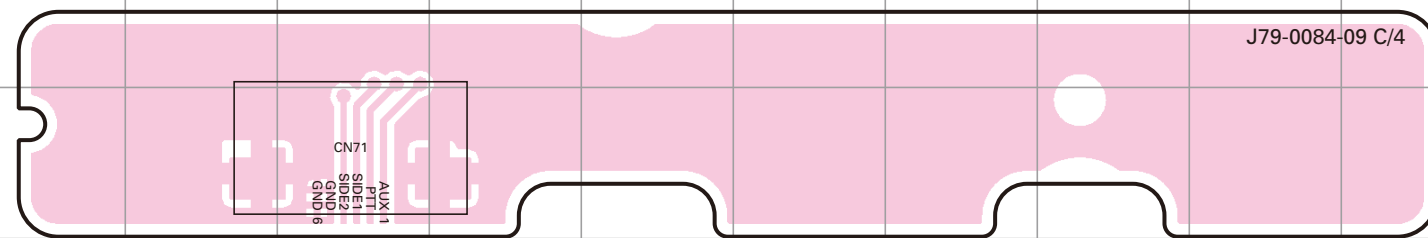


J79-0084-09 B/4

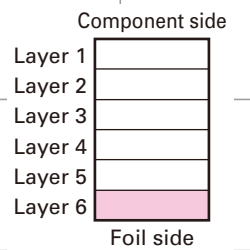
TK-3170 PC BOARD

PC BOARD TK-3170

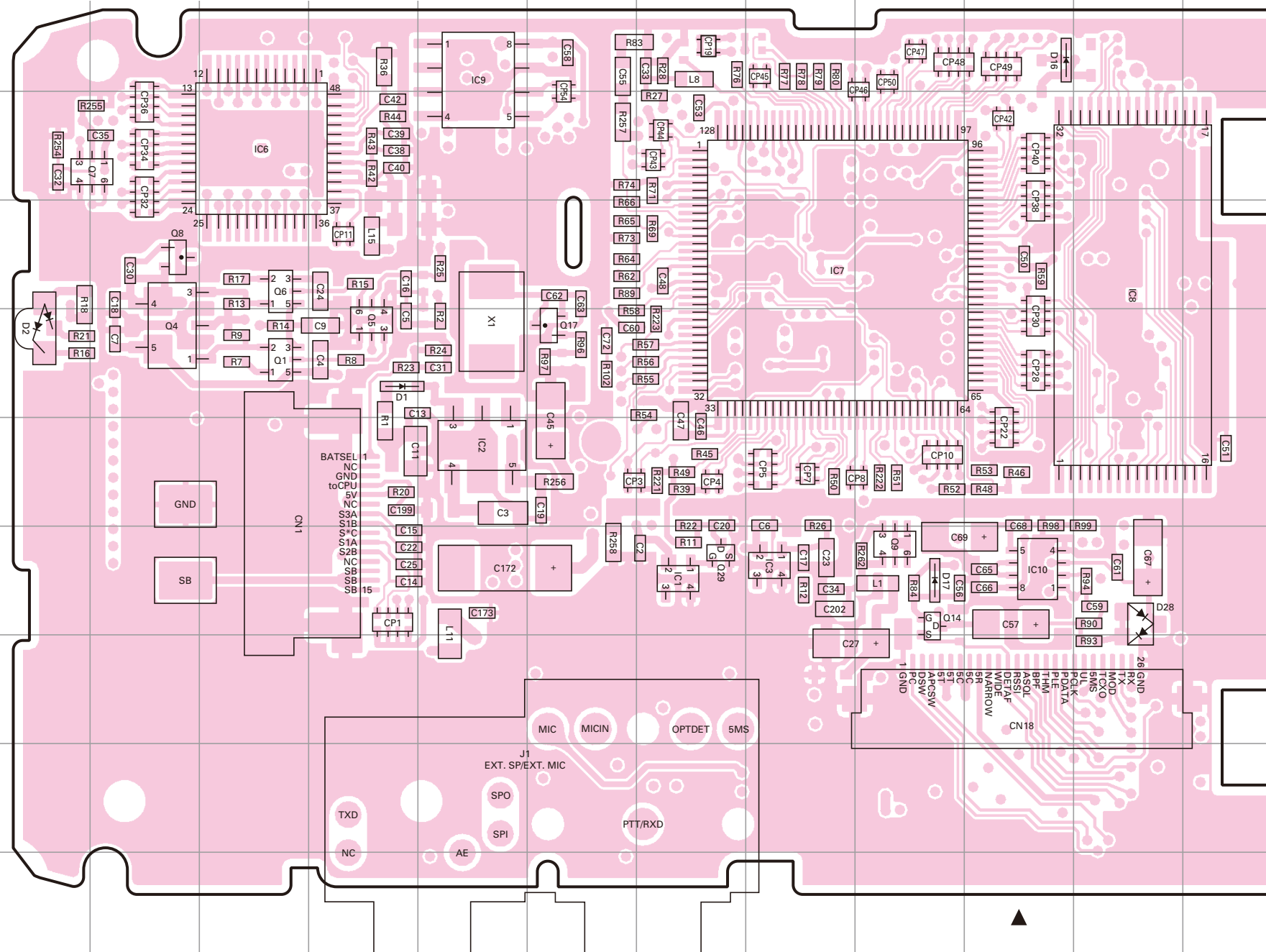
TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Foil side view (J79-0084-09 C/4)



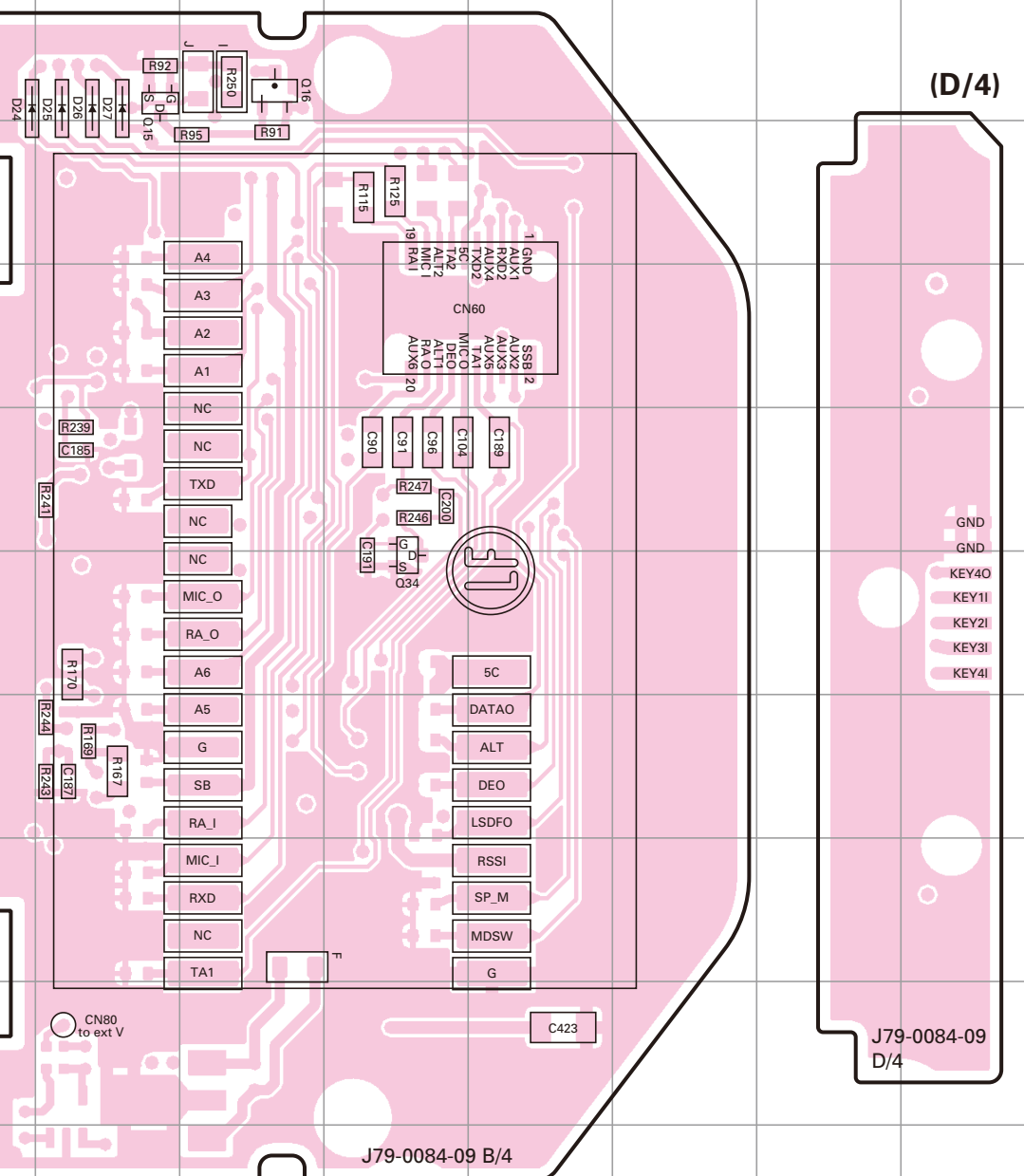
Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	10G	Q1	8C	Q15	5M	D17	10I
IC2	9E	Q4	8B	Q16	5N	D24	5L
IC3	10H	Q5	8D	Q17	8F	D25	5M
IC6	6C	Q6	7C	Q29	10G	D26	5M
IC7	7H	Q7	6B	Q34	9O	D27	5M
IC8	7K	Q8	7B	D1	8D	D28	10K
IC9	5E	Q9	10I	D2	8A		
IC10	10J	Q14	10I	D16	5J		



TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Foil side view (J79-0084-09 B/4)



TX-RX UNIT (X57-7012-XX) (B/4)
-71 : E -72 : E3 -73 : E4 -74 : E6 -75 : E7
Foil side view (J79-0084-09 B/4)



(D/4)

- GND
- GND
- KEY40
- KEY11
- KEY21
- KEY31
- KEY41

J79-0084-09
D/4

J79-0084-09 B/4

