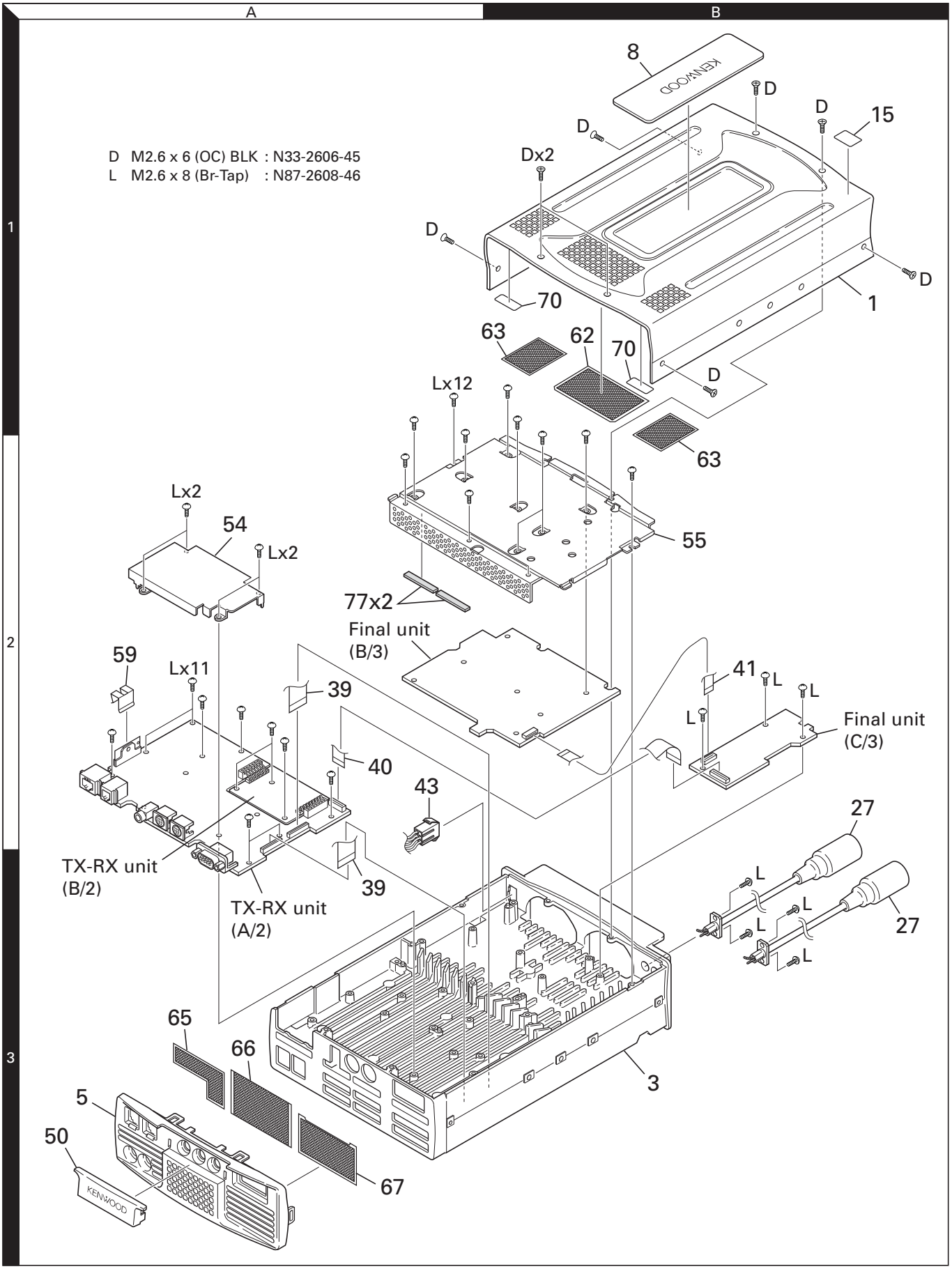
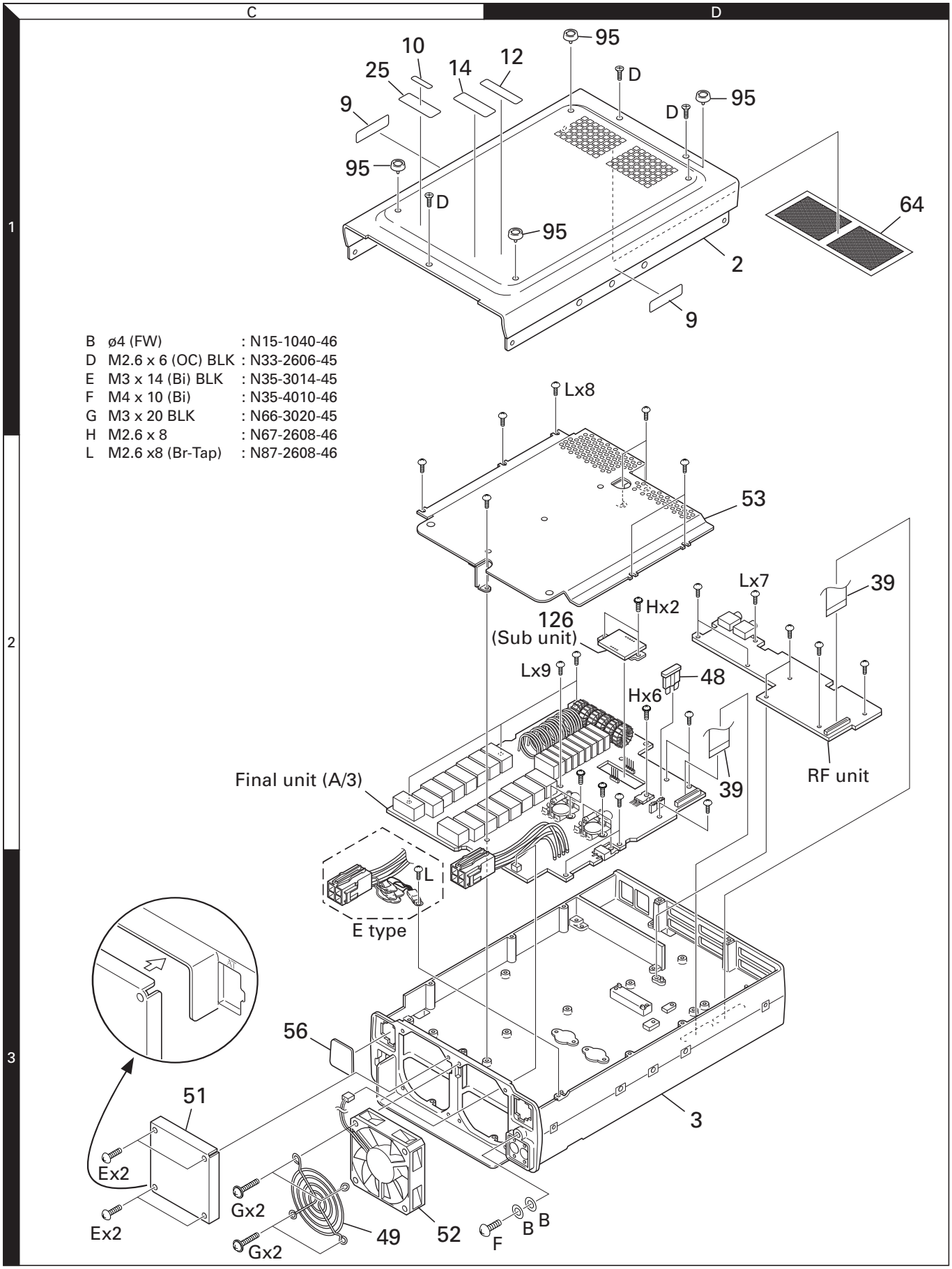
EXPLODED VIEW (MAIN BODY UPPER SIDE)



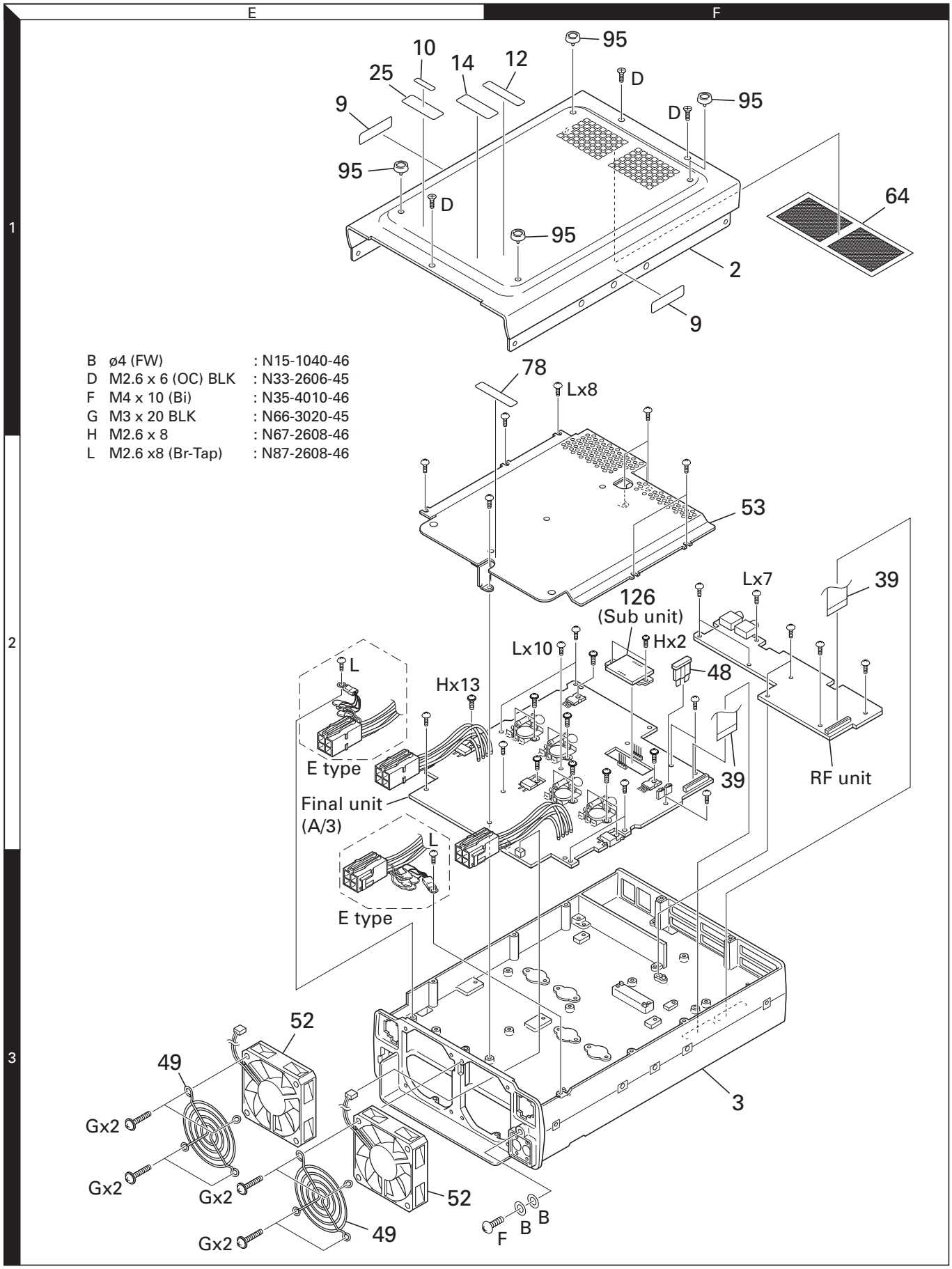
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (MAIN BODY LOWER SIDE) : TS-480SAT



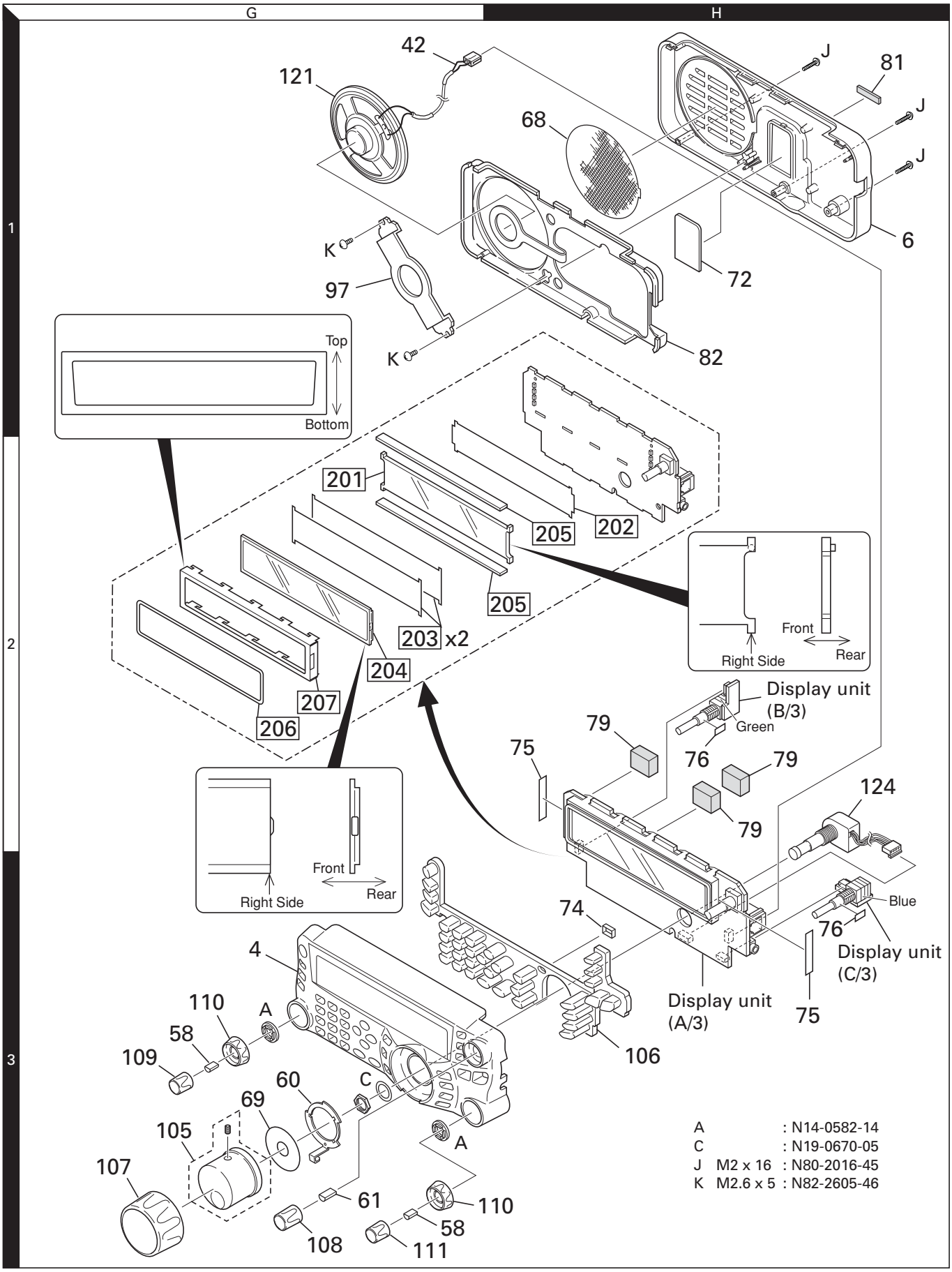
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (MAIN BODY LOWER SIDE) : TS-480HX



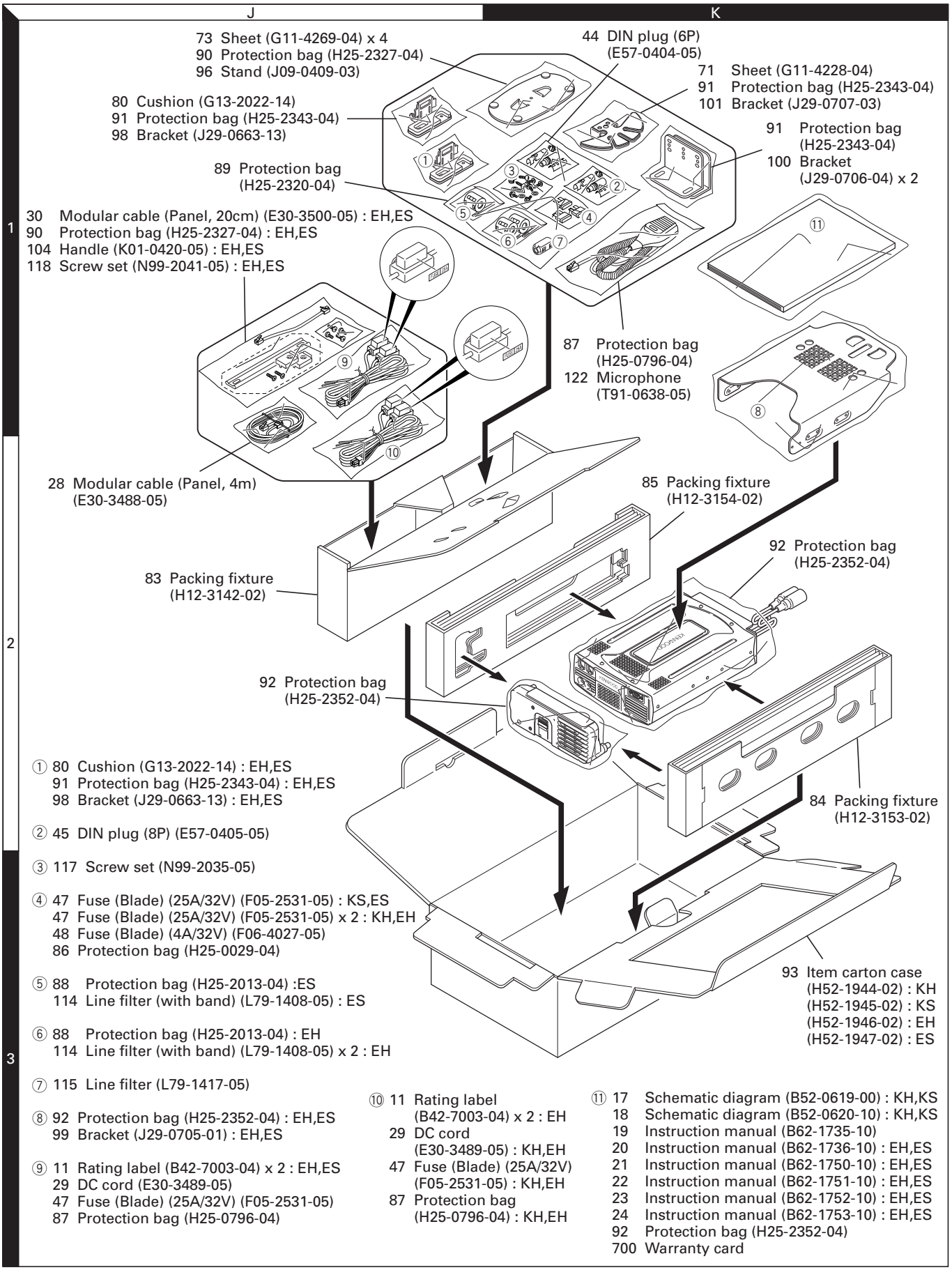
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (PANEL)



Parts with the exploded numbers larger than 700 are not supplied.

PACKING



Parts with the exploded numbers larger than 700 are not supplied.

PARTS LIST

✻ New Parts. ⚠ indicates safety critical components.
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

L : Scandinavia **K** : USA **P** : Canada
Y : PX (Far East, Hawaii) **T** : England **E** : Europe
Y : AAFES (Europe) **X** : Australia **M** : Other Areas

TS-480HX/480SAT (Y52-328X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
TS-480HX/480SAT					
1	1B	✻	A01-2189-02	CABINET (UPPER)	
2	1D,1F	✻	A01-2190-02	CABINET (LOWER)	
3	3A,3F	✻	A10-4061-01	CHASSIS	KH,EH
3	3A,3D	✻	A10-4062-01	CHASSIS	KS,ES
4	3G	✻	A62-1076-03	PANEL ASSY	
5	3A	✻	A62-1079-01	PANEL	
6	1H	✻	A82-0052-11	REAR PANEL	
8	1B	✻	B03-3610-03	DRESSING PLATE	
9	1D,1F		B42-2455-04	STICKER	
10	1C,1E		B42-5650-04	S/NO. LABEL	
11	1J		B42-7003-04	RATING LABEL (DC CORD)	EH,ES
12	1D,1F		B42-7019-04	STANDARD LABEL (FCC)	KH,KS
14	1C,1E		B42-7070-04	STANDARD LABEL (FCC)	KH,KS
15	1B		B42-7116-04	STICKER (ANT)	
14	1C,1E		B42-7126-04	STANDARD LABEL (E-MARK)	EH,ES
17	1K	✻	B52-0619-00	SCHEMATIC DIAGRAM	KH,KS
18	1K	✻	B52-0620-10	SCHEMATIC DIAGRAM	KH,KS
19	1K	✻	B62-1735-10	INSTRUCTION MANUAL (ENGLISH)	
20	1K	✻	B62-1736-10	INSTRUCTION MANUAL (GERMANY)	EH,ES
21	1K	✻	B62-1750-10	INSTRUCTION MANUAL (FRENCH)	EH,ES
22	1K	✻	B62-1751-10	INSTRUCTION MANUAL (ITALIAN)	EH,ES
23	1K	✻	B62-1752-10	INSTRUCTION MANUAL (SPANISH)	EH,ES
24	1K	✻	B62-1753-10	INSTRUCTION MANUAL (DOUCHE)	EH,ES
25	1E	✻	B72-2166-04	MODEL NAME PLATE	KH
25	1C	✻	B72-2167-04	MODEL NAME PLATE	KS
25	1E	✻	B72-2168-04	MODEL NAME PLATE	EH
25	1C	✻	B72-2169-04	MODEL NAME PLATE	ES
27	3B		E30-3009-15	ANTENNA CABLE (ANT)	
28	1J	✻	E30-3488-05	MODULAR CABLE (PANEL, 4M)	
29	1J,2J	✻	E30-3489-05	DC CORD	
30	1J	✻	E30-3500-05	MODULAR CABLE (PANEL, 20CM)	EH,ES
-		✻	E37-1059-05	LEAD WIRE WITH CONNECTOR (X57 CN369)	
-		✻	E37-1060-05	LEAD WIRE WITH MINIPIN PLUG (X57 CN501)	
-		✻	E37-1061-05	LEAD WIRE WITH MINIPIN PLUG (X57 CN3)	
-		✻	E37-1062-05	LEAD WIRE WITH MINIPIN PLUG (X57 CN1)	
-		✻	E37-1063-05	LEAD WIRE WITH MINIPIN PLUG (X44 CN2)	
-		✻	E37-1064-05	LEAD WIRE WITH MINIPIN PLUG (X44 CN1)	
-		✻	E37-1067-05	LEAD WIRE WITH MINIPIN PLUG (X45 CN504)	KS,ES
-		✻	E37-1068-05	LEAD WIRE WITH MINIPIN PLUG (X45 CN505)	KS,ES
39	2A,2D,2F	✻	E37-1069-05	FLAT CABLE (X57 CN395,403)	
40	2A	✻	E37-1070-05	FLAT CABLE (X57 CN375)	
41	2B	✻	E37-1071-05	FLAT CABLE (X45 CN501)	
42	1G	✻	E37-1072-05	LEAD WIRE WITH CONNECTOR (SP)	
43	2A	✻	E37-1073-05	LEAD WIRE WITH CONNECTOR (EXT. AT)	
44	1K	✻	E57-0404-05	DIN PLUG (6P ACC)	
45	1K	✻	E57-0405-05	DIN PLUG (8P ACC)	
47	1J,1K		F05-2531-05	FUSE (BLADE) (25A/32V)	
48	2D,2F,1K		F06-4027-05	FUSE (BLADE) (4A/32V)	
49	3C,3E	✻	F07-1874-05	COVER (FAN)	
50	3A	✻	F07-1875-13	COVER (DIN, SP, KEY)	
51	3C	✻	F07-1878-04	COVER (FAN)	KS,ES
52	3C,3E	✻	F09-0478-05	FAN MOTOR	
53	2D,2F	✻	F10-2450-02	SHIELDING COVER (X45 A/3)	
54	2A	✻	F10-2456-03	SHIELDING COVER (X57 A/2)	
55	2B	✻	F10-2470-02	SHIELDING COVER (X45 B/3)	
56	3C	✻	F15-1007-04	SHIELDING PLATE (DC2)	KS,ES
58	3G		G02-0505-05	KNOB SPRING	
59	2A		G02-0570-04	FLAT SPRING (X57 IC734)	
60	3G	✻	G02-0898-04	FLAT SPRING (TORQUE LEVER)	
61	3G		G09-0405-05	KNOB SPRING	
62	1B	✻	G10-1305-04	FIBROUS SHEET	
63	1B	✻	G10-1306-04	FIBROUS SHEET	
64	1D,1F	✻	G10-1307-04	FIBROUS SHEET	
65	3A	✻	G10-1308-04	FIBROUS SHEET	
66	3A	✻	G10-1309-04	FIBROUS SHEET	
67	3A	✻	G10-1310-04	FIBROUS SHEET	
68	1H	✻	G10-1311-04	FIBROUS SHEET	
69	3G	✻	G10-1313-14	FIBROUS SHEET	
-			G10-1326-04	FIBROUS SHEET	
70	1B		G10-1328-04	FIBROUS SHEET	
71	1K	✻	G11-4228-04	SHEET	
72	1H	✻	G11-4245-04	SHEET	
73	1K	✻	G11-4269-04	SHEET	
74	3H	✻	G11-4270-04	SHEET	
75	2H,3H	✻	G11-4278-04	SHEET	
76	2H,3H		G11-4287-04	SHEET	
77	2A		G13-1871-05	CONDUCTIVE CUSHION	
78	2F		G13-1872-05	CONDUCTIVE CUSHION	KH,EH
79	2H		G13-1888-04	CUSHION	
80	1J	✻	G13-2022-14	CUSHION	
81	1H	✻	G13-2024-04	CUSHION	
82	1H	✻	G53-1559-02	PACKING	
83	2J	✻	H12-3142-02	PACKING FIXTURE	
84	2K	✻	H12-3153-02	PACKING FIXTURE	
85	2K	✻	H12-3154-02	PACKING FIXTURE	
86	1K		H25-0029-04	PROTECTION BAG (60/110/0.07)	
87	1J,2J		H25-0796-04	PROTECTION BAG	
88	1K		H25-2013-04	PROTECTION BAG (80✻180 T=0.08)	EH,ES
89	1K		H25-2320-04	PROTECTION BAG	
90	1J,1K	✻	H25-2327-04	PROTECTION BAG (100/250/0.07)	
91	1J,1K	✻	H25-2343-04	PROTECTION BAG	
92	1K,2K	✻	H25-2352-04	PROTECTION BAG (250/350/0.07)	
93	3K	✻	H52-1944-02	ITEM CARTON CASE	KH
93	3K	✻	H52-1945-02	ITEM CARTON CASE	KS
93	3K	✻	H52-1946-02	ITEM CARTON CASE	EH
93	3K	✻	H52-1947-02	ITEM CARTON CASE	ES
95	1D,1F		J02-0441-05	FOOT	
96	1K	✻	J09-0409-03	STAND	
97	1G	✻	J21-8449-04	HARDWARE FIXTURE	
98	1J	✻	J29-0663-13	BRACKET	
99	1K	✻	J29-0705-01	BRACKET	EH,ES
100	1K	✻	J29-0706-04	BRACKET	
101	1K	✻	J29-0707-03	BRACKET	
-			J61-0307-05	BAND	
104	1J		K01-0420-05	HANDLE	EH,ES
105	3G	✻	K21-1105-03	KNOB (MAIN DIAL)	
106	3H	✻	K29-9263-02	KEY TOP	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TS-480HX/480SAT
RF UNIT (X44-327X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
107	3G	✻	K29-9264-04	KNOB RING	
108	3G	✻	K29-9265-03	KNOB	
109	3G	✻	K29-9266-03	KNOB	
110	3G	✻	K29-9267-03	KNOB	
111	3G	✻	K29-9270-03	KNOB	
114	1J,1K		L79-1408-05	LINE FILTER (WITH BAND)	EH,ES
115	1K		L79-1417-05	LINE FILTER	
A	3G		N14-0582-14	CIRCULAR NUT	
B	3D,3F		N15-1040-46	FLAT WASHER	
C	3G	✻	N19-0670-05	SPECIAL WASHER	
D	1B,1D,1F		N33-2606-45	OVAL HEAD MACHINE SCREW	
E	3C	✻	N35-3014-45	BINDING HEAD MACHINE SCREW	KS,ES
F	3D,3F		N35-4010-46	BINDING HEAD MACHINE SCREW	
G	3C,3E	✻	N66-3020-45	PAN HEAD SEMS SCREW B	
H	2D,2F		N67-2608-46	PAN HEAD SEMS SCREW W	
J	1H		N80-2016-45	PAN HEAD TAPTITE SCREW	
K	1G		N82-2605-46	BINDING HEAD TAPTITE SCREW	
L	2B,2D,2F		N87-2608-46	BRAZIER HEAD TAPTITE SCREW	
117	1K	✻	N99-2035-05	SCREW SET	
118	1J	✻	N99-2041-05	SCREW SET	EH,ES
121	1G		T07-0298-05	SPEAKER	
122	1K	✻	T91-0638-05	MICROPHONE	
124	2H	✻	W02-1836-15	ENCODER	
126	2F	✻	X58-4900-00	SUB UNIT	KH,EH
126	2D	✻	X58-4900-01	SUB UNIT	KS,ES

RF UNIT (X44-327X-XX) 0-00 : KH,KS 2-71 : EH,ES

C1			CK73FB1H102K	CHIP C	1000PF	K	
C2		✻	C90-4111-05	ELECTRO	470UF	16WV	
C3			CK73GB1H103K	CHIP C	0.010UF	K	
C4			CC73GCH1H390J	CHIP C	39PF	J	
C5			CK73GB1H103K	CHIP C	0.010UF	K	
C6			CK73FB1C105K	CHIP C	1.0UF	K	
C7			CK73GB1C104K	CHIP C	0.10UF	K	
C8			CC73GCH1H470J	CHIP C	47PF	J	
C10			CK73GB1C104K	CHIP C	0.10UF	K	
C11			CC73GCH1H080B	CHIP C	8.0PF	B	
C12			CC73GCH1H470J	CHIP C	47PF	J	
C13			CK73FB1E104K	CHIP C	0.10UF	K	
C14			CK73GB1H103K	CHIP C	0.010UF	K	
C15			CK73EB1H104K	CHIP C	0.10UF	K	
C16			CK73GB1H102K	CHIP C	1000PF	K	
C17			CK73GB1C104K	CHIP C	0.10UF	K	
C18			CK73EB1H104K	CHIP C	0.10UF	K	
C19			CK73GB1C104K	CHIP C	0.10UF	K	
C20			CK73GB1H103K	CHIP C	0.010UF	K	
C22			CK73GB1H103K	CHIP C	0.010UF	K	
C23			CC73FCH1H150J	CHIP C	15PF	J	
C24			CK73GB1H103K	CHIP C	0.010UF	K	
C25			CE04EW1E4R7M	ELECTRO	4.7UF	25WV	
C26			CK73GB1H103K	CHIP C	0.010UF	K	
C28			CK73FB1E104K	CHIP C	0.10UF	K	
C29			CK73FB1C105K	CHIP C	1.0UF	K	
C30			CK73FB1H102K	CHIP C	1000PF	K	
C32		✻	C90-4111-05	ELECTRO	470UF	16WV	
C33			CC73GCH1H180J	CHIP C	18PF	J	

Ref. No.	Address	New parts	Parts No.	Description			Destination
C51			CC73FCH1H152J	CHIP C	1500PF	J	
C52			CK73GB1C104K	CHIP C	0.10UF	K	
C53,54			CC73FCH1H222J	CHIP C	2200PF	J	
C55			CC73FCH1H152J	CHIP C	1500PF	J	
C56-59			CC73FCH1H222J	CHIP C	2200PF	J	
C60		✻	CC73FCH1H122J	CHIP C	1200PF	J	
C61			CK73GB1C104K	CHIP C	0.10UF	K	
C62			CC73FCH1H182J	CHIP C	1800PF	J	
C63			CK73GB1C104K	CHIP C	0.10UF	K	
C64			CC73GCH1H821J	CHIP C	820PF	J	
C65			CK73GB1C104K	CHIP C	0.10UF	K	
C66			CC73GCH1H681J	CHIP C	680PF	J	
C67			CK73GB1C104K	CHIP C	0.10UF	K	
C68			CC73GCH1H471J	CHIP C	470PF	J	
C69			CK73GB1C104K	CHIP C	0.10UF	K	
C70			CC73GCH1H331J	CHIP C	330PF	J	
C71			CK73GB1C104K	CHIP C	0.10UF	K	
C72			CC73GCH1H221J	CHIP C	220PF	J	
C73			CK73GB1C104K	CHIP C	0.10UF	K	
C74			CC73GCH1H560J	CHIP C	56PF	J	
C75			CK73GB1C104K	CHIP C	0.10UF	K	
C76			CC73GCH1H121J	CHIP C	120PF	J	
C77			CK73GB1C104K	CHIP C	0.10UF	K	
C78			CC73GCH1H221J	CHIP C	220PF	J	
C79			CC73GCH1H102J	CHIP C	1000PF	J	
C80			CC73FCH1H222J	CHIP C	2200PF	J	
C81-88			CC73GCH1H102J	CHIP C	1000PF	J	
C89			CC73GCH1H560J	CHIP C	56PF	J	
C90		✻	CC73FCH1H122J	CHIP C	1200PF	J	
C91			CC73GCH1H680J	CHIP C	68PF	J	
C92			CC73GCH1H471J	CHIP C	470PF	J	
C93			CC73GCH1H331J	CHIP C	330PF	J	
C94			CC73GCH1H101J	CHIP C	100PF	J	
C95			CC73GCH1H680J	CHIP C	68PF	J	
C96			CC73GCH1H151J	CHIP C	150PF	J	
C97			CC73GCH1H820J	CHIP C	82PF	J	
C98			CK73GB1H103K	CHIP C	0.010UF	K	
C99-107			CC73GCH1H102J	CHIP C	1000PF	J	
C108			CK73FB1C105K	CHIP C	1.0UF	K	
C109			CK73GB1C104K	CHIP C	0.10UF	K	
C110		✻	CC73FCH1H122J	CHIP C	1200PF	J	
C111			CK73GB1C104K	CHIP C	0.10UF	K	
C112			CC73FCH1H182J	CHIP C	1800PF	J	
C113			CK73GB1C104K	CHIP C	0.10UF	K	
C114			CC73GCH1H821J	CHIP C	820PF	J	
C115			CK73GB1C104K	CHIP C	0.10UF	K	
C116			CC73GCH1H681J	CHIP C	680PF	J	
C117			CK73GB1C104K	CHIP C	0.10UF	K	
C118			CC73GCH1H471J	CHIP C	470PF	J	
C119			CK73GB1C104K	CHIP C	0.10UF	K	
C120			CC73GCH1H331J	CHIP C	330PF	J	
C121			CK73GB1C104K	CHIP C	0.10UF	K	
C122			CC73GCH1H221J	CHIP C	220PF	J	
C123			CK73GB1C104K	CHIP C	0.10UF	K	
C124			CC73GCH1H560J	CHIP C	56PF	J	
C125			CK73GB1C104K	CHIP C	0.10UF	K	
C126			CC73GCH1H181J	CHIP C	180PF	J	
C127			CK73GB1C104K	CHIP C	0.10UF	K	
C128			CC73FCH1H222J	CHIP C	2200PF	J	
C129,130			CC73GCH1H090B	CHIP C	9.0PF	B	EH,ES

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

RF UNIT (X44-327X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
C131			CC73GCH1H150J	CHIP C 15PF J	
C151			CK73GB1H103K	CHIP C 0.010UF K	
C152			CK73GB1H102K	CHIP C 1000PF K	
C153			CK73GB1C104K	CHIP C 0.10UF K	
C154			CK73FB1E104K	CHIP C 0.10UF K	
C155			CK73GB1H103K	CHIP C 0.010UF K	
C156			CC73GCH1H050B	CHIP C 5.0PF B	
C157			CK73GB1C104K	CHIP C 0.10UF K	
C158			CC73GCH1H560J	CHIP C 56PF J	
C159			CK73GB1C104K	CHIP C 0.10UF K	
C161			CC73GCH1H150J	CHIP C 15PF J	
C162			CC73GCH1H820J	CHIP C 82PF J	
C163			CC73GCH1H390J	CHIP C 39PF J	
C164			CK73GB1H103K	CHIP C 0.010UF K	
C165			CC73GCH1H330J	CHIP C 33PF J	
C166,167			CK73FB1E104K	CHIP C 0.10UF K	
C168			CK73GB1C104K	CHIP C 0.10UF K	
C169			CK73FB1E104K	CHIP C 0.10UF K	
C170,171			CK73GB1C104K	CHIP C 0.10UF K	
C173			CK73GB1C104K	CHIP C 0.10UF K	
C174			CC73GCH1H102J	CHIP C 1000PF J	
C176			CK73GB1H102K	CHIP C 1000PF K	
C177,178			CK73GB1H103K	CHIP C 0.010UF K	
C179			CK73GB1H102K	CHIP C 1000PF K	
C180			CK73FB1E104K	CHIP C 0.10UF K	
C181			CK73GB1H103K	CHIP C 0.010UF K	
C182			CC73GCH1H020B	CHIP C 2.0PF B	
C184			CK73GB1H102K	CHIP C 1000PF K	
C185			CK73GB1H471K	CHIP C 470PF K	
C186			CK73GB1H103K	CHIP C 0.010UF K	
C187			CK73GB1C104K	CHIP C 0.10UF K	
C188			CK73GB1H471K	CHIP C 470PF K	
C190			CK73GB1H102K	CHIP C 1000PF K	
C191,192			CK73GB1H103K	CHIP C 0.010UF K	
C193			CC73GCH1H020B	CHIP C 2.0PF B	
C194			CK73GB1H102K	CHIP C 1000PF K	
C195			CC73GCH1H010B	CHIP C 1.0PF B	
C196			CC73GCH1H030B	CHIP C 3.0PF B	
C198			CK73GB1H102K	CHIP C 1000PF K	
C200			CK73GB1H103K	CHIP C 0.010UF K	
C201			CK73GB1H102K	CHIP C 1000PF K	
C252			CK73GB1H103K	CHIP C 0.010UF K	
C253-255			CK73GB1C104K	CHIP C 0.10UF K	
C256-258			CK73GB1H103K	CHIP C 0.010UF K	
C259			CK73GB1H471K	CHIP C 470PF K	
C260			CK73GB1H103K	CHIP C 0.010UF K	
C261			CC73GUJ1H040C	CHIP C 4.0PF C	
C262,263			CK73GB1H103K	CHIP C 0.010UF K	
C266,267			CK73GB1H102K	CHIP C 1000PF K	
C268			CC73GCH1H010B	CHIP C 1.0PF B	
C269-271			CK73GB1H102K	CHIP C 1000PF K	
C272			CK73GB1C104K	CHIP C 0.10UF K	
C273			CK73GB1H102K	CHIP C 1000PF K	
C274			CK73GB1H103K	CHIP C 0.010UF K	
C275			CC73GCH1H060B	CHIP C 6.0PF B	
C276			CK73GB1H102K	CHIP C 1000PF K	
C277			CK73GB1H103K	CHIP C 0.010UF K	
C278-280			CK73GB1H102K	CHIP C 1000PF K	
C281			CC73GCH1H010B	CHIP C 1.0PF B	
C282			CK73GB1H103K	CHIP C 0.010UF K	

Ref. No.	Address	New parts	Parts No.	Description	Destination
C285-287			CK73GB1H103K	CHIP C 0.010UF K	
C288			CK73GB1H102K	CHIP C 1000PF K	
C290			CK73GB1H103K	CHIP C 0.010UF K	
C291			CC73GCH1H090B	CHIP C 9.0PF B	
C292			CC73GCH1H220J	CHIP C 22PF J	
C293			CK73GB1H103K	CHIP C 0.010UF K	
C295			CK73GB1C104K	CHIP C 0.10UF K	
C297			CC73GCH1H330J	CHIP C 33PF J	
C298			CK73GB1H103K	CHIP C 0.010UF K	
C301			CK73GB1H103K	CHIP C 0.010UF K	
C302			CK73GB1C104K	CHIP C 0.10UF K	
C303-305			CK73GB1H102K	CHIP C 1000PF K	
C321-325			CK73GB1H102K	CHIP C 1000PF K	
TC51,52			C05-0385-05	CERAMIC TRIMMER CAP (20PF)	EH,ES
-			E18-0254-05	SOCKET	
CN1,2			E04-0154-05	PIN SOCKET	
CN4			E40-5487-05	PIN ASSY	
CN51,52			E40-5487-05	PIN ASSY	
CN152			E40-0211-05	PIN ASSY	
CN153			E04-0154-05	PIN SOCKET	
CN252			E40-0211-05	PIN ASSY	
CN253			E04-0154-05	PIN SOCKET	
CN254			E04-0191-05	PIN SOCKET	
CN309			E40-5978-05	FLAT CABLE CONNECTOR	
J301,302			E11-0455-05	3.5D PHONE JACK (3P)	
-		✻	F10-2462-04	SHIELDING CASE	
-		✻	F10-2478-04	SHIELDING CASE	
-		✻	F10-2483-04	SHIELDING CASE	
-		✻	F10-2493-04	SHIELDING CASE	
-			F20-3320-04	INSULATING SHEET	
L1			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L2			L40-1085-34	SMALL FIXED INDUCTOR (100NH)	
L3,4			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L5			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L6		✻	L41-1585-09	SMALL FIXED INDUCTOR	
L7			L33-0695-05	SMALL FIXED INDUCTOR	
L9			L33-0695-05	SMALL FIXED INDUCTOR	
L10		✻	L41-2785-08	SMALL FIXED INDUCTOR	
L11			L41-1085-08	SMALL FIXED INDUCTOR	
L51		✻	L41-6895-09	SMALL FIXED INDUCTOR	EH,ES
L52			L33-0695-05	SMALL FIXED INDUCTOR	
L53		✻	L41-6895-09	SMALL FIXED INDUCTOR	EH,ES
L54		✻	L41-5695-09	SMALL FIXED INDUCTOR	
L55			L33-0695-05	SMALL FIXED INDUCTOR	
L56,57		✻	L41-6895-09	SMALL FIXED INDUCTOR	
L58		✻	L41-2295-09	SMALL FIXED INDUCTOR	
L59		✻	L41-1595-09	SMALL FIXED INDUCTOR	
L60		✻	L41-1095-09	SMALL FIXED INDUCTOR	
L61		✻	L41-4785-08	SMALL FIXED INDUCTOR	
L62		✻	L41-3985-08	SMALL FIXED INDUCTOR	
L63		✻	L41-2785-08	SMALL FIXED INDUCTOR	
L64		✻	L41-1885-08	SMALL FIXED INDUCTOR	
L65		✻	L41-1585-08	SMALL FIXED INDUCTOR	
L66			L34-4569-05	AIR-CORE COIL	
L67		✻	L41-6895-09	SMALL FIXED INDUCTOR	
L68			L33-0695-05	SMALL FIXED INDUCTOR	
L69		✻	L41-5695-09	SMALL FIXED INDUCTOR	
L70		✻	L41-6885-09	SMALL FIXED INDUCTOR	
L71		✻	L41-1895-09	SMALL FIXED INDUCTOR	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

RF UNIT (X44-327X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
L72		✻	L41-1295-09	SMALL FIXED INDUCTOR	
L73		✻	L41-2795-09	SMALL FIXED INDUCTOR	
L74		✻	L41-2295-09	SMALL FIXED INDUCTOR	
L75		✻	L41-2785-08	SMALL FIXED INDUCTOR	
L77			L33-0695-05	SMALL FIXED INDUCTOR	
L78		✻	L41-2295-09	SMALL FIXED INDUCTOR	
L79		✻	L41-1595-09	SMALL FIXED INDUCTOR	
L80		✻	L41-1095-09	SMALL FIXED INDUCTOR	
L81		✻	L41-4785-08	SMALL FIXED INDUCTOR	
L82		✻	L41-3985-08	SMALL FIXED INDUCTOR	
L83		✻	L41-2785-08	SMALL FIXED INDUCTOR	
L84		✻	L41-1885-08	SMALL FIXED INDUCTOR	
L85		✻	L41-1585-08	SMALL FIXED INDUCTOR	
L86			L34-4569-05	AIR-CORE COIL	
L87		✻	L41-2785-08	SMALL FIXED INDUCTOR	
L151			L33-0695-05	SMALL FIXED INDUCTOR	
L152		✻	L39-1476-05	TOROIDAL COIL	
L153			L40-3385-34	SMALL FIXED INDUCTOR (330NH)	
L154			L40-3391-37	SMALL FIXED INDUCTOR (3.3UH)	
L155		✻	L41-1585-08	SMALL FIXED INDUCTOR	
L156		✻	L41-1085-08	SMALL FIXED INDUCTOR	
L157,158		✻	L39-1476-05	TOROIDAL COIL	
L159		✻	L39-1480-05	TOROIDAL COIL	
L160			L40-4785-34	SMALL FIXED INDUCTOR (470NH)	
L161			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L162			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L163			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L164		✻	L34-4709-05	COIL	
L165			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L166-168			L34-4408-05	COIL	
L251			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L252		✻	L39-1476-05	TOROIDAL COIL	
L253		✻	L39-1480-05	TOROIDAL COIL	
L254			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L255			L40-3985-34	SMALL FIXED INDUCTOR (390NH)	
L256			L40-1085-34	SMALL FIXED INDUCTOR (100NH)	
L257,258			L40-4785-34	SMALL FIXED INDUCTOR (470NH)	
L259			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L260,261			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L262		✻	L39-1480-05	TOROIDAL COIL	
L263			L40-4785-34	SMALL FIXED INDUCTOR (470NH)	
L264		✻	L39-1480-05	TOROIDAL COIL	
L265			L40-4785-34	SMALL FIXED INDUCTOR (470NH)	
L301-305			L40-1091-37	SMALL FIXED INDUCTOR (1.000UH)	
XF151		✻	L71-0605-05	MCF (73.095MHZ)	
CP302,303			RK75GB1J103J	CHIP-COM 10K J 1/16W	
R1			RK73GB1J821J	CHIP R 820 J 1/16W	
R2			RK73GB1J6R8J	CHIP R 6.8 J 1/16W	
R3			RK73GB1J821J	CHIP R 820 J 1/16W	
R4			RK73EB2B560J	CHIP R 56 J 1/8W	
R5			RK73GB1J103J	CHIP R 10K J 1/16W	
R6			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R7			RK73EB2B471J	CHIP R 470 J 1/8W	
R8			RK73EB2B181J	CHIP R 180 J 1/8W	
R9			RK73FB2A100J	CHIP R 10 J 1/10W	
R10			RK73GB1J473J	CHIP R 47K J 1/16W	
R11			RK73GB1J331J	CHIP R 330 J 1/16W	
R12			RK73GB1J681J	CHIP R 680 J 1/16W	
R13			RK73GB1J103J	CHIP R 10K J 1/16W	
R14			RK73GB1J333J	CHIP R 33K J 1/16W	

Ref. No.	Address	New parts	Parts No.	Description	Destination
R15			RK73GB1J101J	CHIP R 100 J 1/16W	
R16			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R17			RK73GB1J151J	CHIP R 150 J 1/16W	
R18,19			RK73FB2A560J	CHIP R 56 J 1/10W	
R20,21			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R22			R92-0670-05	CHIP R 0 OHM	
R51-60			RK73FB2A470J	CHIP R 47 J 1/10W	
R61			RK73GB1J471J	CHIP R 470 J 1/16W	
R62-70			RK73GB1J330J	CHIP R 33 J 1/16W	
R71-80			RK73FB2A470J	CHIP R 47 J 1/10W	
R81			RK73GB1J560J	CHIP R 56 J 1/16W	
R82			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R151			RK73GB1J103J	CHIP R 10K J 1/16W	
R152			RK73FB2A221J	CHIP R 220 J 1/10W	
R153,154			RK73FB2A121J	CHIP R 120 J 1/10W	
R155			RK73GB1J682J	CHIP R 6.8K J 1/16W	
R156			RK73GB1J104J	CHIP R 100K J 1/16W	
R157			RK73GB1J473J	CHIP R 47K J 1/16W	
R158			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R159			RK73GB1J473J	CHIP R 47K J 1/16W	
R160			RK73GB1J471J	CHIP R 470 J 1/16W	
R161-164			RK73GB1J100J	CHIP R 10 J 1/16W	
R165			RK73GB1J683J	CHIP R 68K J 1/16W	
R167			RK73FB2A470J	CHIP R 47 J 1/10W	
R168			RK73GB1J470J	CHIP R 47 J 1/16W	
R170			R92-1252-05	CHIP R 0 OHM J 1/16W	
R172			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R173			RK73GB1J100J	CHIP R 10 J 1/16W	
R174			RK73FB2A471J	CHIP R 470 J 1/10W	
R175			RK73FB2A561J	CHIP R 560 J 1/10W	
R176			RK73GB1J473J	CHIP R 47K J 1/16W	
R177,178			RK73GB1J681J	CHIP R 680 J 1/16W	
R179			RK73GB1J120J	CHIP R 12 J 1/16W	
R181			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R182,183			RK73GB1J100J	CHIP R 10 J 1/16W	
R184			RK73GB1J271J	CHIP R 270 J 1/16W	
R185			RK73GB1J220J	CHIP R 22 J 1/16W	
R186,187			RK73GB1J100J	CHIP R 10 J 1/16W	
R188			RK73GB1J471J	CHIP R 470 J 1/16W	
R189			RK73GB1J681J	CHIP R 680 J 1/16W	
R190			RK73GB1J103J	CHIP R 10K J 1/16W	
R191			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R192			RK73GB1J333J	CHIP R 33K J 1/16W	
R193			RK73GB1J103J	CHIP R 10K J 1/16W	
R194			RK73FB2A100J	CHIP R 10 J 1/10W	
R195			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R196			R92-1252-05	CHIP R 0 OHM J 1/16W	
R197			RK73GB1J331J	CHIP R 330 J 1/16W	
R198			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R199,200			RK73GB1J331J	CHIP R 330 J 1/16W	
R202			RK73FB2A221J	CHIP R 220 J 1/10W	
R204,205			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R206			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R251			RK73GB1J470J	CHIP R 47 J 1/16W	
R253			RK73FB2A101J	CHIP R 100 J 1/10W	
R254			RK73GB1J820J	CHIP R 82 J 1/16W	
R255,256			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R257			R92-1252-05	CHIP R 0 OHM J 1/16W	
R258			RK73GB1J471J	CHIP R 470 J 1/16W	
R259			RK73GB1J331J	CHIP R 330 J 1/16W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

RF UNIT (X44-327X-XX)
FINAL UNIT (X45-365X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
R260			R92-1252-05	CHIP R 0 OHM J 1/16W	
R262,263			RK73GB1J331J	CHIP R 330 J 1/16W	
R264			RK73GB1J470J	CHIP R 47 J 1/16W	
R265			RK73GB1J474J	CHIP R 470K J 1/16W	
R266			RK73GB1J100J	CHIP R 10 J 1/16W	
R268			RK73GB1J103J	CHIP R 10K J 1/16W	
R269			RK73GB1J392J	CHIP R 3.9K J 1/16W	
R270			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R271			RK73GB1J182J	CHIP R 1.8K J 1/16W	
R275			RK73GB1J100J	CHIP R 10 J 1/16W	
R276			RK73GB1J471J	CHIP R 470 J 1/16W	
R277			RK73GB1J103J	CHIP R 10K J 1/16W	
R278,279			RK73GB1J331J	CHIP R 330 J 1/16W	
R280			RK73GB1J470J	CHIP R 47 J 1/16W	
R281			R92-1252-05	CHIP R 0 OHM J 1/16W	
R282			RK73GB1J331J	CHIP R 330 J 1/16W	
R283			RK73GB1J100J	CHIP R 10 J 1/16W	
R284			RK73GB1J124J	CHIP R 120K J 1/16W	
R285			RK73GB1J331J	CHIP R 330 J 1/16W	
R286			RK73GB1J220J	CHIP R 22 J 1/16W	
R287			RK73GB1J331J	CHIP R 330 J 1/16W	
R288			RK73GB1J180J	CHIP R 18 J 1/16W	
R289			RK73GB1J331J	CHIP R 330 J 1/16W	
R290			RK73GB1J470J	CHIP R 47 J 1/16W	
R291			RK73GB1J101J	CHIP R 100 J 1/16W	
R292			R92-1252-05	CHIP R 0 OHM J 1/16W	
R293			RK73GB1J330J	CHIP R 33 J 1/16W	
R294			RK73GB1J221J	CHIP R 220 J 1/16W	
R295			RK73GB1J471J	CHIP R 470 J 1/16W	
R296			RK73GB1J220J	CHIP R 22 J 1/16W	
R297			RK73GB1J470J	CHIP R 47 J 1/16W	
R298			RK73GB1J681J	CHIP R 680 J 1/16W	
R301			RK73GB1J101J	CHIP R 100 J 1/16W	
R313			RK73GB1J473J	CHIP R 47K J 1/16W	
R314			R92-1252-05	CHIP R 0 OHM J 1/16W	
R315			RK73GB1J473J	CHIP R 47K J 1/16W	
R316,317			RK73GB1J103J	CHIP R 10K J 1/16W	
R401			R92-1061-05	JUMPER REST 0 OHM	
K1			S51-1428-05	RELAY	
D1			MA2S111	DIODE	
D2			V08(G)	DIODE	
D3,4			RLS245	DIODE	
D5			V08(G)	DIODE	
D51,52			HVC131	DIODE	
D53			LFB01	DIODE	
D54			HVC131	DIODE	
D55			RN731V	DIODE	
D56-59		✻	1SV312	DIODE	
D60			HVC131	DIODE	
D61-69			HSC277	DIODE	
D151			HSC277	DIODE	
D152		✻	1SV312	DIODE	
D154,155			DAN235E	DIODE	
D156			HSC277	DIODE	
D251			HSC277	DIODE	
D252			DAN235E	DIODE	
D253			MA2S111	DIODE	
D254			RN731V	DIODE	
D255			DAN235E	DIODE	

Ref. No.	Address	New parts	Parts No.	Description	Destination
D256			HSB88WS	DIODE	
D301-304			1SS388	DIODE	
IC251		✻	TA4107F	MOS IC	
IC301			BU2099FV	MOS IC	
Q1		✻	KRA318E	DIGITAL TRANSISTOR	
Q2		✻	HN7G01FU	TRANSISTOR	
Q3			2SK2596	FET	
Q4			2SD1757K	TRANSISTOR	
Q51-60		✻	KRA318E	DIGITAL TRANSISTOR	
Q151			KRC402E	DIGITAL TRANSISTOR	
Q152			RN47A5	TRANSISTOR	
Q153,154			3SK131(M)	FET	
Q155		✻	KRC418E	DIGITAL TRANSISTOR	
Q156,157			2SK520(K44)	FET	
Q158		✻	HN7G01FU	TRANSISTOR	
Q159			2SK2596	FET	
Q160,161			2SK520(K44)	FET	
Q251			2SK1830	FET	
Q252			2SC3356	TRANSISTOR	
Q253		✻	3SK317	FET	
Q255			2SC3356	TRANSISTOR	
Q256		✻	KRC418E	DIGITAL TRANSISTOR	
Q301,302			KRC402E	DIGITAL TRANSISTOR	
TH251			157-101-65001	THERMISTOR	

FINAL UNIT (X45-365X-XX) 0-11 : KS 2-71 : ES

D100		✻	B30-2263-15	LED (R/LOWER)			
C6,7			CK73FB1E104K	CHIP C	0.10UF	K	
C9,10			CK73FB1E104K	CHIP C	0.10UF	K	
C13,14			CK73FB1E104K	CHIP C	0.10UF	K	
C16			CK73FB1H102K	CHIP C	1000PF	K	
C17			CK73FB1E104K	CHIP C	0.10UF	K	
C18			CE04EW1E100M	ELECTRO	10UF	25WV	
C19			CE04EW1E331M	ELECTRO	330UF	25WV	
C21			CK73FB1E104K	CHIP C	0.10UF	K	
C22			CK73FB1H103K	CHIP C	0.010UF	K	
C23			CK73FB1E104K	CHIP C	0.10UF	K	
C27			CK73FB1H103K	CHIP C	0.010UF	K	
C28			CK73FB1E104K	CHIP C	0.10UF	K	
C29			CE04EW1E101M	ELECTRO	100UF	25WV	
C30			CE04EW1E331M	ELECTRO	330UF	25WV	
C32			CM73F2H181J	CHIP C	180PF	J	
C33,34			CE04EW1E100M	ELECTRO	10UF	25WV	
C35,36			CK73FB1E104K	CHIP C	0.10UF	K	
C37,38		✻	C93-0716-05	CHIP C	3300PF	K	
C39			CE04EW1E100M	ELECTRO	10UF	25WV	
C40,41			CK73FB1E104K	CHIP C	0.10UF	K	
C42			CE04EW1E221M	ELECTRO	220UF	25WV	
C43-45			CK73FB1E104K	CHIP C	0.10UF	K	
C46,47			CM73F2H331J	CHIP C	330PF	J	
C48			CK73FB1E104K	CHIP C	0.10UF	K	
C49			CE04EW1E101M	ELECTRO	100UF	25WV	
C50			CK73FB1E104K	CHIP C	0.10UF	K	
C51,52			C93-0560-05	CHIP C	10PF	D	
C53			C91-2691-05	CERAMIC	470PF	250WV	
C54			CE04EW1E471M	ELECTRO	470UF	25WV	
C55			CK73FB1E104K	CHIP C	0.10UF	K	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-365X-XX)

Ref. No.	Address	New parts	Parts No.	Description			Destination
C57			CE04EW1E471M	ELECTRO	470UF	25WV	
C58,59			CK73FB1H103K	CHIP C	0.010UF	K	
C61			CK73FB1E104K	CHIP C	0.10UF	K	
C62			CK73FB1H102K	CHIP C	1000PF	K	
C63			CK73FB1E104K	CHIP C	0.10UF	K	
C64			CE04EW1E100M	ELECTRO	10UF	25WV	
C65			CK73FB1H102K	CHIP C	1000PF	K	
C66			CK73FB1H103K	CHIP C	0.010UF	K	
C67		✻	C90-4116-05	ELECTRO	22UF	16WV	
C68			CK73FB1H103K	CHIP C	0.010UF	K	
C69			CK73FB1H102K	CHIP C	1000PF	K	
C70			C93-0568-05	CHIP C	47PF	J	
C71			CM73F2H221J	CHIP C	220PF	J	
C72			CE04EW1HR22M	ELECTRO	0.22UF	50WV	
C73			CK73FB1H103K	CHIP C	0.010UF	K	
C74,75		✻	C93-0716-05	CHIP C	3300PF	K	
C76			CK73FB1H103K	CHIP C	0.010UF	K	
C77			CM73F2H271J	CHIP C	270PF	J	
C78			CK73FB1H102K	CHIP C	1000PF	K	
C79			CK73FB1H103K	CHIP C	0.010UF	K	
C80			CK73FB1H102K	CHIP C	1000PF	K	
C81			CK73FB1E104K	CHIP C	0.10UF	K	
C90-93			CK45FB1H103K	CERAMIC	0.010UF	K	
C94			C93-0572-05	CHIP C	100PF	J	
C95			C93-0568-05	CHIP C	47PF	J	
C96			C93-0572-05	CHIP C	100PF	J	
C97			C93-0568-05	CHIP C	47PF	J	
C102			CM73F2H102J	CHIP C	1000PF	J	
C103			CM73F2H561J	CHIP C	560PF	J	
C104			CC45FSL2H680J	CERAMIC	68PF	J	
C105			CM73F2H102J	CHIP C	1000PF	J	
C106			CM73F2H821J	CHIP C	820PF	J	
C107			CC45FSL2H121J	CERAMIC	120PF	J	
C108			CC45FSL2H680J	CERAMIC	68PF	J	
C109			CM73F2H102J	CHIP C	1000PF	J	
C111			CK73FB1H103K	CHIP C	0.010UF	K	
C152			CM73F2H561J	CHIP C	560PF	J	
C154			CC45FSL2H331J	CERAMIC	330PF	J	
C155			CM73F2H102J	CHIP C	1000PF	J	
C157			CC45FSL2H151J	CERAMIC	150PF	J	
C158			CM73F2H561J	CHIP C	560PF	J	
C159			CK73FB1H103K	CHIP C	0.010UF	K	
C202			CC45FSL2H181J	CERAMIC	180PF	J	
C203,204			CC45FSL2H121J	CERAMIC	120PF	J	
C205			CM73F2H561J	CHIP C	560PF	J	
C206			C93-0570-05	CHIP C	68PF	J	
C207			C93-0569-05	CHIP C	56PF	J	
C208			CM73F2H681J	CHIP C	680PF	J	
C209			C93-0567-05	CHIP C	39PF	J	
C210			CC45FSL2H391J	CERAMIC	390PF	J	
C211			CK73FB1H103K	CHIP C	0.010UF	K	
C212			C93-0570-05	CHIP C	68PF	J	
C252			CC45FSL2H151J	CERAMIC	150PF	J	
C254			CC45FSL2H470J	CERAMIC	47PF	J	
C255,256			CC45FSL2H221J	CERAMIC	220PF	J	
C257			C93-0560-05	CHIP C	10PF	D	
C258			CC45FSL2H101J	CERAMIC	100PF	J	
C259			CC45FSL2H271J	CERAMIC	270PF	J	
C260			CK73FB1H103K	CHIP C	0.010UF	K	
C304			CC45FSL2H181J	CERAMIC	180PF	J	

Ref. No.	Address	New parts	Parts No.	Description			Destination
C306			CC45FSL2H270J	CERAMIC	27PF	J	
C307			CC45FSL2H271J	CERAMIC	270PF	J	
C309			C93-0569-05	CHIP C	56PF	J	
C310			CC45FSL2H181J	CERAMIC	180PF	J	
C311			CK73FB1H103K	CHIP C	0.010UF	K	
C312			C93-0554-05	CHIP C	4.0PF	C	
C352			CC45FSL2H101J	CERAMIC	100PF	J	
C354			C93-0558-05	CHIP C	8.0PF	D	
C355			CC45FSL2H271J	CERAMIC	270PF	J	
C356			CC45FSL2H470J	CERAMIC	47PF	J	
C357			CC45FSL2H151J	CERAMIC	150PF	J	
C359			CK73FB1H103K	CHIP C	0.010UF	K	
C402			CC45FSL2H330J	CERAMIC	33PF	J	
C403			CC45FSL2H560J	CERAMIC	56PF	J	
C404			CC45FSL2H121J	CERAMIC	120PF	J	
C405			CC45FSL2H180J	CERAMIC	18PF	J	
C407			CC45FSL2H151J	CERAMIC	150PF	J	
C408			CC45FSL2H050C	CERAMIC	5.0PF	C	
C410			CC45FSL2H820J	CERAMIC	82PF	J	
C411			CK73FB1H103K	CHIP C	0.010UF	K	
C412			C93-0562-05	CHIP C	15PF	J	
C413			C93-0563-05	CHIP C	18PF	J	
C451			CK73FB1H103K	CHIP C	0.010UF	K	
C452			CC45FSL2H220J	CERAMIC	22PF	J	
C454			C93-0555-05	CHIP C	5.0PF	C	
C456			CC45FSL2H560J	CERAMIC	56PF	J	
C458			C93-0563-05	CHIP C	18PF	J	
C459			CC45FSL2H560J	CERAMIC	56PF	J	
C461			C93-0563-05	CHIP C	18PF	J	
C462			CC45FSL2H220J	CERAMIC	22PF	J	
C463			CK73FB1H103K	CHIP C	0.010UF	K	
C502			CK73FB1H102K	CHIP C	1000PF	K	
C503			CK73FB1H103K	CHIP C	0.010UF	K	
C504			CC73FCH1H680J	CHIP C	68PF	J	
C505			CK73FB1E104K	CHIP C	0.10UF	K	
C506			CK73FB1H102K	CHIP C	1000PF	K	
C507			CC45FCH2H030C	CERAMIC	3.0PF	C	
C508			CC73FCH1H560J	CHIP C	56PF	J	
C509			CK73FB1H102K	CHIP C	1000PF	K	
C511-522			CK73FB1H103K	CHIP C	0.010UF	K	
C523			CK73FB1H102K	CHIP C	1000PF	K	
C525,526			CK73FB1H103K	CHIP C	0.010UF	K	
C527			CE04EW1C470M	ELECTRO	47UF	16WV	
C528			CK73FB1H103K	CHIP C	0.010UF	K	
C529			CC73FCH1H470J	CHIP C	47PF	J	
C530			CK73FB1H103K	CHIP C	0.010UF	K	
C531			CC73FCH1H470J	CHIP C	47PF	J	
C535			CK73FB1H103K	CHIP C	0.010UF	K	
C536			CC73FCH1H100D	CHIP C	10PF	D	
C537			CC73FCH1H080D	CHIP C	8.0PF	D	
C801			CK73FB1H102K	CHIP C	1000PF	K	
C802			CK73FB1E104K	CHIP C	0.10UF	K	
C803,804			CK73FB1H103K	CHIP C	0.010UF	K	
C805			CK73FB1E104K	CHIP C	0.10UF	K	
C806,807			CK73FB1H103K	CHIP C	0.010UF	K	
C808			CK73FB1E104K	CHIP C	0.10UF	K	
C809-814			CK73FB1H103K	CHIP C	0.010UF	K	
C815			CK73FB1E104K	CHIP C	0.10UF	K	
C816-821			CK73FB1H103K	CHIP C	0.010UF	K	
C822			CK73FB1E104K	CHIP C	0.10UF	K	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-365X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
C823,824			C91-3115-05	HV CAP 10PF 2KV	
C825,826			CK73FB1H103K	CHIP C 0.010UF K	
C827-832			C91-3115-05	HV CAP 10PF 2KV	
C833-836			CK73FB1H103K	CHIP C 0.010UF K	
C837-844			C91-3115-05	HV CAP 10PF 2KV	
C845-848			CK73FB1H103K	CHIP C 0.010UF K	
C849,850			C91-3126-05	HV CAP 10PF 3KV	
C851-854			CK73FB1H103K	CHIP C 0.010UF K	
C855,856			C91-3127-05	HV CAP 18PF 3KV	
C857-860			CK73FB1H103K	CHIP C 0.010UF K	
C861-864			C91-3127-05	HV CAP 18PF 3KV	
C865-868			CK73FB1H103K	CHIP C 0.010UF K	
C869-872			C91-3123-05	HV CAP 150PF 3KV	
C873-876			CK73FB1H103K	CHIP C 0.010UF K	
C877,878			C91-3123-05	HV CAP 150PF 3KV	
C879-882			CK73FB1H103K	CHIP C 0.010UF K	
C883,884			C91-3123-05	HV CAP 150PF 3KV	
C885-887			CK73FB1H103K	CHIP C 0.010UF K	
C888			C91-3123-05	HV CAP 150PF 3KV	
C889			CK73FB1H103K	CHIP C 0.010UF K	
C890			C91-3123-05	HV CAP 150PF 3KV	
C891,892			CK73FB1H103K	CHIP C 0.010UF K	KS
C893,894			CK73FB1E104K	CHIP C 0.10UF K	
C895-910			CK73FB1H103K	CHIP C 0.010UF K	
TC501			C05-0031-15	CERAMIC TRIMMER CAP (10P)	
CN1			E04-0154-05	PIN SOCKET	
CN2			E40-5978-05	FLAT CABLE CONNECTOR	
CN3			E40-5608-05	PIN ASSY	
CN4			E40-5607-05	PIN ASSY	
CN5			E40-3246-05	PIN ASSY	
CN8			E40-3252-05	PIN ASSY	
CN9			E40-3246-05	PIN ASSY	
CN11			E04-0154-05	PIN SOCKET	
CN12,13			E23-0996-05	TEST TERMINAL	
CN101			E40-5734-05	FLAT CABLE CONNECTOR	
CN102			E04-0191-05	PIN SOCKET	
CN501			E40-5739-05	FLAT CABLE CONNECTOR	
CN502			E40-5758-05	FLAT CABLE CONNECTOR	
CN503-505			E04-0190-05	PIN SOCKET	
CN819,820			E04-0154-05	PIN SOCKET	
W1		✻	E37-1056-05	LEAD WIRE WITH TERMINAL	KS
W1		✻	E37-1104-05	LEAD WIRE WITH TERMINAL	ES
F1			F53-0093-05	FUSE	
F2			F53-0108-05	FUSE	
F3			F06-4027-05	FUSE (BLADE) (4A/32V)	
CN6,7			J13-0410-05	FUSE HOLDER	
-			L92-0104-05	TROIDAL CORE	
-			L92-0105-05	TROIDAL CORE	
-			L92-0107-05	TROIDAL CORE	
-			L92-0108-05	TROIDAL CORE	
L1			L40-1505-34	SMALL FIXED INDUCTOR (15UH)	
L2			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L6			L92-0149-05	FERRITE CHIP	
L7		✻	L39-1488-05	TOROIDAL COIL	
L8			L92-0131-05	FERRITE CHIP	
L11			L33-0699-05	CHOKE COIL	
L12			L40-1001-12	SMALL FIXED INDUCTOR	
L13		✻	L39-1491-15	TOROIDAL COIL	

Ref. No.	Address	New parts	Parts No.	Description	Destination
L14			L39-1434-05	TOROIDAL COIL	
L15			L39-1450-05	TOROIDAL COIL	
L16,17			L33-0699-05	CHOKE COIL	
L18			L39-1451-05	TOROIDAL COIL	
L19			L40-4795-34	SMALL FIXED INDUCTOR (4.7UH)	
L20			L33-0651-05	CHOKE COIL	
L21		✻	L39-1490-05	TOROIDAL COIL	
L24			L33-0617-15	CHOKE COIL	
L25,26			L92-0131-05	FERRITE CHIP	
L27			L34-1231-15	AIR-CORE COIL	
L28		✻	L39-1485-05	TOROIDAL COIL	
L29			L92-0131-05	FERRITE CHIP	
L30-35			L33-0699-05	CHOKE COIL	
L36			L92-0149-05	FERRITE CHIP	
L90,91			L39-0421-04	COIL	
L101			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L102			L39-1259-05	TOROIDAL COIL	
L103			L39-1260-05	TOROIDAL COIL	
L151			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L152			L39-1405-05	TOROIDAL COIL	
L153			L39-1225-05	TOROIDAL COIL	
L201			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L202			L39-1266-05	TOROIDAL COIL	
L203,204			L39-1223-05	TOROIDAL COIL	
L251			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L252,253			L39-1221-05	TOROIDAL COIL	
L301			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L302			L34-1278-05	AIR-CORE COIL	
L303,304			L39-1221-05	TOROIDAL COIL	
L351			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L352			L34-1279-05	AIR-CORE COIL	
L353			L34-1280-05	AIR-CORE COIL	
L401			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L402			L34-4661-05	AIR-CORE COIL	
L403,404			L34-1281-05	AIR-CORE COIL	
L405			L92-0131-05	FERRITE CHIP	
L451			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L452			L34-4662-05	AIR-CORE COIL	
L453			L34-4491-05	AIR-CORE COIL	
L454			L34-1359-05	AIR-CORE COIL	
L455			L92-0131-05	FERRITE CHIP	
L501			L40-1021-33	SMALL FIXED INDUCTOR	
L502			L39-0480-15	TOROIDAL COIL	
L503			L40-1005-85	SMALL FIXED INDUCTOR (10UH)	
L504			L40-1021-33	SMALL FIXED INDUCTOR	
L505			L39-1442-05	TOROIDAL COIL	
L506			L39-1443-05	TOROIDAL COIL	
L507-510			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L511		✻	L41-1585-09	SMALL FIXED INDUCTOR	
L801-803			L39-1441-05	TOROIDAL COIL	
L804			L40-1001-12	SMALL FIXED INDUCTOR	
L805			L39-1441-05	TOROIDAL COIL	
L806,807			L39-1440-05	TOROIDAL COIL	
L808			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L809			L34-4633-05	AIR-CORE COIL	
L810			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L811			L34-4630-05	AIR-CORE COIL	
L812			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L813			L34-4490-05	AIR-CORE COIL	
L814			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-365X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
L815			L34-4490-05	AIR-CORE COIL	
L816			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L817			L34-4628-05	AIR-CORE COIL	
L818			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L819			L34-4490-05	AIR-CORE COIL	
L820			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L821			L34-4490-05	AIR-CORE COIL	
L822-838			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L891			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	KS
R1,2			RK73FB2A470J	CHIP R 47 J 1/10W	
R3			RK73FB2A331J	CHIP R 330 J 1/10W	
R4			RK73FB2A470J	CHIP R 47 J 1/10W	
R5			RK73FB2A100J	CHIP R 10 J 1/10W	
R7,8			RK73FB2A470J	CHIP R 47 J 1/10W	
R10			RK73FB2A221J	CHIP R 220 J 1/10W	
R11			RK73FB2A100J	CHIP R 10 J 1/10W	
R12			RK73FB2A122J	CHIP R 1.2K J 1/10W	
R14			RK73FB2A470J	CHIP R 47 J 1/10W	
R15			RK73FB2A220J	CHIP R 22 J 1/10W	
R16			RK73FB2A391J	CHIP R 390 J 1/10W	
R17			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R18			RK73FB2A332J	CHIP R 3.3K J 1/10W	
R19			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R20			RK73FB2A562J	CHIP R 5.6K J 1/10W	
R21,22			RK73FB2A470J	CHIP R 47 J 1/10W	
R23			RS14DB3D101J	FL-PROOF RS 100 J 2W	
R24			RK73EB2B391J	CHIP R 390 J 1/8W	
R25			R92-3510-05	CHIP R 2.2 J 1W	
R28			R92-3510-05	CHIP R 2.2 J 1W	
R29,30			R92-3511-05	CHIP R 8.2 J 1/2W	
R31,32			R92-1240-05	CHIP R 10 J 1/4W	
R33			RK73FB2A103J	CHIP R 10K J 1/10W	
R34			RK73FB2A223J	CHIP R 22K J 1/10W	
R35		✻	R92-3559-05	METAL FILM R 0.01 J 10W	
R36			R92-1274-05	CHIP R 56 J 1/2W	
R37			R92-0696-05	CHIP R 33 J 1/4W	
R38			RK73FB2A223J	CHIP R 22K J 1/10W	
R39			RK73FB2A103J	CHIP R 10K J 1/10W	
R42			RK73FB2A470J	CHIP R 47 J 1/10W	
R47		✻	R92-3574-05	RESISTOR 0.1 J 2W	
R49			RK73FB2A223J	CHIP R 22K J 1/10W	
R50			RK73FB2A103J	CHIP R 10K J 1/10W	
R51			RK73FB2A681J	CHIP R 680 J 1/10W	
R52			RK73FB2A822J	CHIP R 8.2K J 1/10W	
R53			R92-2018-05	CHIP R 560 J 1/2W	
R54			RS14DB3A101J	FL-PROOF RS 100 J 1W	
R55			RK73FB2A100J	CHIP R 10 J 1/10W	
R56-61			RK73EB2B1R0J	CHIP R 1.0 J 1/8W	
R90,91			RS14DB3F820J	FL-PROOF RS 82 J 3W	
R92			RS14DB3A4R7J	FL-PROOF RS 4.7 J 1W	
R101-105			R92-0679-05	CHIP R 0 OHM	
R501			RK73FB2A100J	CHIP R 10 J 1/10W	
R502			R92-0686-05	CHIP R 33 J 1/2W	
R503			R92-1212-05	CHIP R 27 J 1/2W	
R504			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R505			R92-1316-05	CHIP R 39 J 1W	
R506,507			RK73FB2A101J	CHIP R 100 J 1/10W	
R508,509			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R510,511			RK73FB2A101J	CHIP R 100 J 1/10W	

Ref. No.	Address	New parts	Parts No.	Description	Destination
R512,513			RK73FB2A104J	CHIP R 100K J 1/10W	
R514,515			RK73FB2A103J	CHIP R 10K J 1/10W	
R516,517			RK73FB2A152J	CHIP R 1.5K J 1/10W	
R518,519			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R520,521			RK73FB2A105J	CHIP R 1.0M J 1/10W	
R530			RK73FB2A153J	CHIP R 15K J 1/10W	
R531-534			RK73FB2A101J	CHIP R 100 J 1/10W	
R535-538			RK73FB2A104J	CHIP R 100K J 1/10W	
R539			RK73FB2A103J	CHIP R 10K J 1/10W	
R550			RK73FB2A391J	CHIP R 390 J 1/10W	
R552			RK73FB2A472J	CHIP R 4.7K J 1/10W	
R553			RK73FB2A182J	CHIP R 1.8K J 1/10W	
R554			R92-1061-05	JUMPER REST 0 OHM	
R891			RK73FB2A471J	CHIP R 470 J 1/10W	
VR1-3			R12-6737-05	TRIMMING POT. (3.3K)	
VR501			R12-6730-05	TRIMMING POT. (220)	
VR502			R12-6742-05	TRIMMING POT. (22K)	
W501-506			R92-0150-05	JUMPER REST 0 OHM	
K101,102			S76-0423-05	RELAY	
K151,152			S76-0423-05	RELAY	
K201,202			S76-0423-05	RELAY	
K251,252			S76-0423-05	RELAY	
K301,302			S76-0423-05	RELAY	
K351,352			S76-0423-05	RELAY	
K401,402			S51-1420-05	RELAY	
K451,452			S51-1420-05	RELAY	
K501			S51-1429-05	RELAY	
K502,503			S76-0424-05	RELAY	
K801-808			S76-0415-05	RELAY	
K809-824			S76-0419-05	RELAY	
K891			S76-0415-05	RELAY	KS
D1,2			MA27-B	VARISTOR	
D3			ZSH5MA27	SURGE ABSORBER	
D4			1SS355	DIODE	
D101			1SS355	DIODE	
D151			1SS355	DIODE	
D201			1SS355	DIODE	
D251			1SS355	DIODE	
D301			1SS355	DIODE	
D351			1SS355	DIODE	
D401			1SS355	DIODE	
D451			1SS355	DIODE	
D501,502			1SS348	DIODE	
D503			1SS355	DIODE	
D504,505			HSM88AS	DIODE	
D506,507			1SS355	DIODE	
D508,509			DSA301LA	DIODE	
D801-824			1SS355	DIODE	
D891			1SS355	DIODE	KS
IC1			TA7805F	MOS IC	
IC2			TA7808F	ANALOG IC	
IC501			BU2099FV	MOS IC	
IC502			TA75S393F	MOS IC	
IC503			TC7WH74FU	MOS IC	
IC509,510			TC7SHU04F	MOS IC	
IC801-803			UPD6345GS	MOS IC	
IC804,805			TC7WT125FU	MOS IC	
Q1			2SK2596	FET	
Q2			2SK2595	FET	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-365X-XX)
FINAL UNIT (X45-366X-XX)

Ref. No.	Address	New parts	Parts No.	Description			Destination
Q3			2SC3421(Y)	TRANSISTOR			
Q4,5			2SC2782	TRANSISTOR			
Q6		✻	SI7445DP	FET			
Q7			DTC114EKA	DIGITAL TRANSISTOR			
Q8,9			2SD1757K	TRANSISTOR			
Q10			2SJ305	FET			
Q11			DTC114EKA	DIGITAL TRANSISTOR			
Q501-505			FMA5A	TRANSISTOR			
Q506,507			2SK208(GR)	FET			
Q508			RN47A5	TRANSISTOR			
Q891			DTC114EKA	DIGITAL TRANSISTOR			KS
TH1			157-153-53002	THERMISTOR			
-			212-1021-05	INSULATING TUBE			
FINAL UNIT (X45-366X-XX) 0-00 : KH 2-71 : EH							
D100		✻	B30-2263-15	LED (R)			
C4,5			CK73FB1E104K	CHIP C	0.10UF	K	
C8			CK73FB1E104K	CHIP C	0.10UF	K	
C10-12			CK73FB1E104K	CHIP C	0.10UF	K	
C13			CK73FB1C105K	CHIP C	1.0UF	K	
C14			CK73FB1E104K	CHIP C	0.10UF	K	
C15			CK73FB1H102K	CHIP C	1000PF	K	
C17			CK73FB1E104K	CHIP C	0.10UF	K	
C18			CE04EW1E100M	ELECTRO	10UF	25WV	
C20			CE04EW1E471M	ELECTRO	470UF	25WV	
C21,22			CK73FB1E104K	CHIP C	0.10UF	K	
C23			CK73FB1E103K	CHIP C	0.010UF	K	
C27		✻	C90-4116-05	ELECTRO	22UF	25WV	
C29			CK73FB1E104K	CHIP C	0.10UF	K	
C31,32			CK73FB1E103K	CHIP C	0.010UF	K	
C34			CE04EW1E331M	ELECTRO	330UF	25WV	
C35			CM73F2H561J	CHIP C	560PF	J	
C36,37			CE04EW1E100M	ELECTRO	10UF	25WV	
C38,39			CK73FB1E104K	CHIP C	0.10UF	K	
C40,41		✻	C93-0716-05	CHIP C	3300PF	K	
C42			CE04EW1E100M	ELECTRO	10UF	25WV	
C43,44			CK73FB1E104K	CHIP C	0.10UF	K	
C46-48			CK73FB1E104K	CHIP C	0.10UF	K	
C49			CM73F2H391J	CHIP C	390PF	J	
C50			CM73F2H331J	CHIP C	330PF	J	
C51			CK73FB1E104K	CHIP C	0.10UF	K	
C52			CE04EW1E101M	ELECTRO	100UF	25WV	
C53			CK73FB1E104K	CHIP C	0.10UF	K	
C54			CE04EW1E471M	ELECTRO	470UF	25WV	
C55			CK73FB1E104K	CHIP C	0.10UF	K	
C56			C91-2691-05	CERAMIC	470PF	250WV	
C57			CK73FB1E104K	CHIP C	0.10UF	K	
C60			CM73F2H331J	CHIP C	330PF	J	
C61			CK73FB1H103K	CHIP C	0.010UF	K	
C62			CK73FB1H102K	CHIP C	1000PF	K	
C63			CE04EW1E471M	ELECTRO	470UF	25WV	
C64,65			CK73FB1H103K	CHIP C	0.010UF	K	
C66-71		✻	C93-0716-05	CHIP C	3300PF	K	
C72			CK45FB1H103K	CERAMIC	0.010UF	K	
C73			CK73FB1E104K	CHIP C	0.10UF	K	
C74			CK73FB1H103K	CHIP C	0.010UF	K	

Ref. No.	Address	New parts	Parts No.	Description			Destination
C75			CE04EW1HR22M	ELECTRO	0.22UF	50WV	
C76-78			CK45FB1H103K	CERAMIC	0.010UF	K	
C79			CK73FB1E104K	CHIP C	0.10UF	K	
C80			CM73F2H331J	CHIP C	330PF	J	
C81			CM73F2H391J	CHIP C	390PF	J	
C102			CM73F2H102J	CHIP C	1000PF	J	
C103			CM73F2H561J	CHIP C	560PF	J	
C104			C93-0570-05	CHIP C	68PF	J	
C105			CM73F2H102J	CHIP C	1000PF	J	
C106			CM73F2H821J	CHIP C	820PF	J	
C107			CC45FSL2H121J	CERAMIC	120PF	J	
C108			C93-0570-05	CHIP C	68PF	J	
C109			CM73F2H102J	CHIP C	1000PF	J	
C111			CK73FB1H103K	CHIP C	0.010UF	K	
C152			CM73F2H561J	CHIP C	560PF	J	
C153			C93-0565-05	CHIP C	27PF	J	
C154			CC45FSL2H221J	CERAMIC	220PF	J	
C155			CM73F2H102J	CHIP C	1000PF	J	
C156			CC45FSL2H151J	CERAMIC	150PF	J	
C158			CC45FSL2H101J	CERAMIC	100PF	J	
C159			CM73F2H681J	CHIP C	680PF	J	
C160			CK73FB1H103K	CHIP C	0.010UF	K	
C202			CM73F2H221J	CHIP C	220PF	J	
C203,204			C93-0572-05	CHIP C	100PF	J	
C205			C93-0571-05	CHIP C	82PF	J	
C206			C93-0570-05	CHIP C	68PF	J	
C207			CM73F2H471J	CHIP C	470PF	J	
C208			C93-0570-05	CHIP C	68PF	J	
C209			C93-0569-05	CHIP C	56PF	J	
C210			CM73F2H561J	CHIP C	560PF	J	
C211			C93-0572-05	CHIP C	100PF	J	
C212			C93-0567-05	CHIP C	39PF	J	
C213			CM73F2H331J	CHIP C	330PF	J	
C214			C93-0563-05	CHIP C	18PF	J	
C215			CK73FB1H103K	CHIP C	0.010UF	K	
C253			C93-0570-05	CHIP C	68PF	J	
C254			C93-0567-05	CHIP C	39PF	J	
C255			CC45FSL2H391J	CERAMIC	390PF	J	
C256			C93-0567-05	CHIP C	39PF	J	
C257			C93-0566-05	CHIP C	33PF	J	
C259			CC45FSL2H271J	CERAMIC	270PF	J	
C261			CK73FB1H103K	CHIP C	0.010UF	K	
C305			CC45FSL2H151J	CERAMIC	150PF	J	
C306			CC45FSL2H121J	CERAMIC	120PF	J	
C307,308			C93-0564-05	CHIP C	22PF	J	
C309			CC45FSL2H151J	CERAMIC	150PF	J	
C310			CC45FSL2H181J	CERAMIC	180PF	J	
C311			C93-0564-05	CHIP C	22PF	J	
C313			CC45FSL2H101J	CERAMIC	100PF	J	
C315			CK73FB1H103K	CHIP C	0.010UF	K	
C355			C93-0564-05	CHIP C	22PF	J	
C356			CC45FSL2H181J	CERAMIC	180PF	J	
C357			C93-0565-05	CHIP C	27PF	J	
C358			CC45FSL2H221J	CERAMIC	220PF	J	
C359			C93-0568-05	CHIP C	47PF	J	
C360			C93-0560-05	CHIP C	10PF	D	
C362			CC45FSL2H151J	CERAMIC	150PF	J	
C363			CK73FB1H103K	CHIP C	0.010UF	K	
C402			CC45FSL2H151J	CERAMIC	150PF	J	
C403			C93-0570-05	CHIP C	68PF	J	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-366X-XX)

Ref. No.	Address	New parts	Parts No.	Description			Destination
C406			C93-0563-05	CHIP C	18PF	J	
C408			CC45FSL2H181J	CERAMIC	180PF	J	
C409			C93-0560-05	CHIP C	10PF	D	
C410			C93-0555-05	CHIP C	5.0PF	C	
C412			C93-0571-05	CHIP C	82PF	J	
C413			CK73FB1H103K	CHIP C	0.010UF	K	
C451			CK73FB1H103K	CHIP C	0.010UF	K	
C452			C93-0567-05	CHIP C	39PF	J	
C453			C93-0565-05	CHIP C	27PF	J	
C454			C93-0571-05	CHIP C	82PF	J	
C455			C93-0562-05	CHIP C	15PF	J	
C456			C93-0556-05	CHIP C	6.0PF	D	
C457			C93-0572-05	CHIP C	100PF	J	
C459			C93-0568-05	CHIP C	47PF	J	
C460			CK73FB1H103K	CHIP C	0.010UF	K	
C461,462			C93-0569-05	CHIP C	56PF	J	
C463			C93-0567-05	CHIP C	39PF	J	
C464			C93-0555-05	CHIP C	5.0PF	C	
C465			C93-0565-05	CHIP C	27PF	J	
C501			CK73FB1H102K	CHIP C	1000PF	K	
C502			CK73FB1H103K	CHIP C	0.010UF	K	
C503			CC73FCH1H680J	CHIP C	68PF	J	
C504			CK73FB1E104K	CHIP C	0.10UF	K	
C505			CK73FB1H102K	CHIP C	1000PF	K	
C506			CC45FCH2H030C	CERAMIC	3.0PF	C	
C507			CC73FCH1H560J	CHIP C	56PF	J	
C508			CK73FB1H102K	CHIP C	1000PF	K	
C509,510			CK73FB1H103K	CHIP C	0.010UF	K	
C511,512			CC73FCH1H470J	CHIP C	47PF	J	
C535			CK73FB1H103K	CHIP C	0.010UF	K	
C536			CC73GCH1H080D	CHIP C	8.0PF	D	
C800			CM73F2H391J	CHIP C	390PF	J	
C801			CM73F2H560J	CHIP C	56PF	J	
C803			CE04EW1E100M	ELECTRO	10UF	25WV	
C804			CK73FB1E104K	CHIP C	0.10UF	K	
C805			CM73F2H561J	CHIP C	560PF	J	
C806			CK73FB1E104K	CHIP C	0.10UF	K	
C807			CE04EW1E100M	ELECTRO	10UF	25WV	
C808,809		✻	C93-0716-05	CHIP C	3300PF	K	
C810			CK73FB1E104K	CHIP C	0.10UF	K	
C811			CM73F2H391J	CHIP C	390PF	J	
C812			CM73F2H331J	CHIP C	330PF	J	
C814			CK73FB1E104K	CHIP C	0.10UF	K	
C816			CE04EW1E101M	ELECTRO	100UF	25WV	
C817			CK73FB1E104K	CHIP C	0.10UF	K	
C819			CM73F2H560J	CHIP C	56PF	J	
C821			C91-2691-05	CERAMIC	470PF	250WV	
C822			CE04EW1E471M	ELECTRO	470UF	25WV	
C823			CM73F2H331J	CHIP C	330PF	J	
C824			CK73FB1E104K	CHIP C	0.10UF	K	
C826			CK73FB1E104K	CHIP C	0.10UF	K	
C827			CK73FB1H103K	CHIP C	0.010UF	K	
C828			CE04EW1HR22M	ELECTRO	0.22UF	50WV	
C829			CK45FB1H103K	CERAMIC	0.010UF	K	
C830-835		✻	C93-0716-05	CHIP C	3300PF	K	
C836			CK45FB1H103K	CERAMIC	0.010UF	K	
C837			CK73FB1E104K	CHIP C	0.10UF	K	
C838			CE04CW1E100M	ELECTRO	10UF	25WV	
C839,840			CK45FB1H103K	CERAMIC	0.01UF	K	
C841			C93-0553-05	CHIP C	3.0PF	C	

Ref. No.	Address	New parts	Parts No.	Description	Destination
C842			CC73FCH1H180J	CHIP C 18PF J	
C843			CC73FCH1H222J	CHIP C 2200PF J	
TC501			C05-0031-15	CERAMIC TRIMMER CAP (10PF)	
CN1			E04-0154-05	PIN SOCKET	
CN2			E40-5978-05	FLAT CABLE CONNECTOR	
CN3			E40-5608-05	PIN ASSY	
CN4			E40-5607-05	PIN ASSY	
CN5			E40-3246-05	PIN ASSY	
CN8			E40-3252-05	PIN ASSY	
CN9,10			E40-3246-05	PIN ASSY	
CN12,13			E23-0996-05	TEST TERMINAL	
CN101			E40-5734-05	FLAT CABLE CONNECTOR	
CN501			E40-5739-05	FLAT CABLE CONNECTOR	
CN502			E40-5758-05	FLAT CABLE CONNECTOR	
CN503			E04-0190-05	PIN SOCKET	
CN829,830			E23-0996-05	TEST TERMINAL	
W1		✻	E37-1056-05	LEAD WIRE WITH TERMINAL	KH
W1		✻	E37-1104-05	LEAD WIRE WITH TERMINAL	EH
W101		✻	E37-1105-05	LEAD WIRE WITH MINIPIN PLUG	
W801		✻	E37-1056-05	LEAD WIRE WITH TERMINAL	KH
W801		✻	E37-1104-05	LEAD WIRE WITH TERMINAL	EH
F3			F06-4027-05	FUSE (BLADE) (4A/32V)	
F4			F53-0110-05	FUSE	
F801			F53-0093-05	FUSE	
CN6,7			J13-0410-05	FUSE HOLDER	
-			L92-0104-05	TROIDAL CORE	
-			L92-0105-05	TROIDAL CORE	
L1			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L2			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L3			L92-0131-05	FERRITE CHIP	
L5			L92-0131-05	FERRITE CHIP	
L6			L92-0149-05	FERRITE CHIP	
L7		✻	L39-1483-05	TOROIDAL COIL	
L8			L92-0131-05	FERRITE CHIP	
L9			L33-0699-05	CHOKE COIL	
L11			L92-0131-05	FERRITE CHIP	
L12		✻	L39-1482-15	TOROIDAL COIL	
L13			L40-1001-12	SMALL FIXED INDUCTOR	
L14		✻	L39-1487-05	TOROIDAL COIL	
L15			L39-1450-05	TOROIDAL COIL	
L16,17			L33-0699-05	CHOKE COIL	
L18			L39-1451-05	TOROIDAL COIL	
L19			L40-4795-34	SMALL FIXED INDUCTOR (4.7UH)	
L20			L33-0651-05	CHOKE COIL	
L21		✻	L39-1490-05	TOROIDAL COIL	
L24			L33-0617-15	CHOKE COIL	
L25,26			L92-0131-05	FERRITE CHIP	
L27		✻	L39-1485-05	TOROIDAL COIL	
L28			L33-0699-05	CHOKE COIL	
L101			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L102			L39-1259-05	TOROIDAL COIL	
L103			L39-1260-05	TOROIDAL COIL	
L151			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L152		✻	L39-1486-05	TOROIDAL COIL	
L153			L39-0458-05	TOROIDAL COIL	
L201			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L202			L39-0463-05	TOROIDAL COIL	
L203,204			L39-1440-05	TOROIDAL COIL	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-366X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
L251			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L252			L39-0463-05	TOROIDAL COIL	
L253			L39-0460-05	TOROIDAL COIL	
L301			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L302			L34-1359-05	AIR-CORE COIL	
L303,304			L39-1492-05	TOROIDAL COIL	
L351			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L352			L34-1281-05	AIR-CORE COIL	
L353,354			L34-1279-05	AIR-CORE COIL	
L401			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L402			L34-4661-05	AIR-CORE COIL	
L403,404			L34-1281-05	AIR-CORE COIL	
L405			L92-0131-05	FERRITE CHIP	
L451			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L452			L34-1359-05	AIR-CORE COIL	
L453,454			L34-4662-05	AIR-CORE COIL	
L455			L92-0131-05	FERRITE CHIP	
L501			L40-2221-33	SMALL FIXED INDUCTOR	
L502			L39-0480-15	TOROIDAL COIL	
L503			L40-1005-85	SMALL FIXED INDUCTOR (10UH)	
L504			L40-1021-33	SMALL FIXED INDUCTOR	
L505,506			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L507		✻	L41-1585-09	SMALL FIXED INDUCTOR	
L802			L39-0477-05	TOROIDAL COIL	
L803		✻	L39-1487-05	TOROIDAL COIL	
L804			L39-1450-05	TOROIDAL COIL	
L805,806			L33-0699-05	CHOKE COIL	
L807			L40-4795-34	SMALL FIXED INDUCTOR (4.7UH)	
L808			L39-1451-05	TOROIDAL COIL	
L809			L33-0651-05	CHOKE COIL	
L810		✻	L39-1490-05	TOROIDAL COIL	
L814			L33-0617-15	CHOKE COIL	
L816,817			L92-0131-05	FERRITE CHIP	
L818		✻	L39-1479-05	TOROIDAL COIL	
L820		✻	L39-1478-05	TOROIDAL COIL	
L821			L33-0699-05	CHOKE COIL	
L822,823			L40-3311-14	SMALL FIXED INDUCTOR	
R1			RK73FB2A470J	CHIP R 47 J 1/10W	
R2			RK73FB2A331J	CHIP R 330 J 1/10W	
R3			RK73FB2A180J	CHIP R 18 J 1/10W	
R4			RK73FB2A470J	CHIP R 47 J 1/10W	
R5			RK73FB2A331J	CHIP R 330 J 1/10W	
R6			RK73FB2A470J	CHIP R 47 J 1/10W	
R7			RK73FB2A681J	CHIP R 680 J 1/10W	
R9			RK73FB2A331J	CHIP R 330 J 1/10W	
R10			RK73FB2A221J	CHIP R 220 J 1/10W	
R11			RK73FB2A470J	CHIP R 47 J 1/10W	
R12			RK73FB2A100J	CHIP R 10 J 1/10W	
R13			RK73FB2A820J	CHIP R 82 J 1/10W	
R14			RK73FB2A220J	CHIP R 22 J 1/10W	
R15			RK73FB2A681J	CHIP R 680 J 1/10W	
R16			RK73FB2A331J	CHIP R 330 J 1/10W	
R17			RK73FB2A471J	CHIP R 470 J 1/10W	
R18			RK73FB2A470J	CHIP R 47 J 1/10W	
R19			RK73FB2A332J	CHIP R 3.3K J 1/10W	
R20			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R21			RK73FB2A562J	CHIP R 5.6K J 1/10W	
R22			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R23,24			RK73FB2A470J	CHIP R 47 J 1/10W	

Ref. No.	Address	New parts	Parts No.	Description	Destination
R25			RK73FB2A332J	CHIP R 3.3K J 1/10W	
R26			RK73FB2A562J	CHIP R 5.6K J 1/10W	
R28			RK73EB2B391J	CHIP R 390 J 1/8W	
R29			R92-2673-05	CHIP R 1.0 J 1W	
R32			R92-2673-05	RESISTOR 1.0 J 1W	
R33,34			R92-3511-05	RESISTOR 8.2 J 1/2W	
R35,36			R92-1240-05	CHIP R 10 J 1/4W	
R37			RK73FB2A103J	CHIP R 10K J 1/10W	
R38			RK73FB2A223J	CHIP R 22K J 1/10W	
R39		✻	R92-3559-05	METAL FILM R 0.01 J 10W	
R40,41			R92-1245-05	CHIP R 47 J 1/2W	
R42,43			R92-1374-05	CHIP R 47 J 1/4W	
R49-54			RK73EB2B1R0J	CHIP R 1.0 J 1/8W	
R55			RK73FB2A100J	CHIP R 10 J 1/10W	
R56			RK73FB2A4R7J	CHIP R 4.7 J 1/10W	
R58-63			R92-0679-05	CHIP R 0 OHM	
R64,65			RS14DB3F820J	FL-PROOF RS 82 J 3W	
R66			R92-0670-05	CHIP R 0 OHM	
R67			R92-2536-05	CHIP R 2.2 J 1/4W	
R80			RS14DB3D101J	FL-PROOF RS 100 J 2W	
R81			RS14DB3A101J	FL-PROOF RS 100 J 1W	
R90		✻	R92-3574-05	RESISTOR 0.1 J 2W	
R101			R92-0679-05	CHIP R 0 OHM	
R151			R92-0679-05	CHIP R 0 OHM	
R201,202			R92-0679-05	CHIP R 0 OHM	
R251,252			R92-0679-05	CHIP R 0 OHM	
R301			R92-0679-05	CHIP R 0 OHM	
R351			R92-0679-05	CHIP R 0 OHM	
R401,402			R92-0679-05	CHIP R 0 OHM	
R451,452			R92-0679-05	CHIP R 0 OHM	
R501			RK73FB2A100J	CHIP R 10 J 1/10W	
R502			R92-1279-05	CHIP R 33 J 1W	
R503		✻	R92-1305-05	CHIP R 27 J 1W	
R504			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R505-507			RK73FB2A101J	CHIP R 100 J 1/10W	
R508-511			RK73FB2A104J	CHIP R 100K J 1/10W	
R550			RK73FB2A391J	CHIP R 390 J 1/10W	
R551			RK73FB2A182J	CHIP R 1.8K J 1/10W	
R552			RK73FB2A472J	CHIP R 4.7K J 1/10W	
R553			R92-0670-05	CHIP R 0 OHM	
R800			RS14DB3A101J	FL-PROOF RS 100 J 1W	
R803			R92-1318-05	CHIP R 100 J 1W	
R804			RK73EB2B391J	CHIP R 390 J 1/8W	
R805			R92-2673-05	CHIP R 1.0 J 1W	
R808			R92-2673-05	CHIP R 1.0 J 1W	
R809,810			R92-3511-05	CHIP R 8.2 J 1/2W	
R811,812			R92-1240-05	CHIP R 10 J 1/4W	
R813			RK73FB2A103J	CHIP R 10K J 1/10W	
R814			RK73FB2A223J	CHIP R 22K J 1/10W	
R816		✻	R92-3558-05	METAL FILM R 100 J 10W	
R817		✻	R92-3559-05	METAL FILM R 0.01 J 10W	
R822			RK73FB2A100J	CHIP R 10 J 1/10W	
R823			RK73FB2A4R7J	CHIP R 4.7 J 1/10W	
R824-829			RK73EB2B1R0J	CHIP R 1.0 J 1/8W	
R836-841			R92-0679-05	CHIP R 0 OHM	
R842,843			RS14DB3F820J	FL-PROOF RS 82 J 3W	
VR1,2			R12-6730-05	TRIMMING POT. (220)	
VR3			R12-6737-05	TRIMMING POT. (3.3K)	
VR801			R12-6737-05	TRIMMING POT. (3.3K)	
VR802			R12-6744-05	TRIMMING POT. (47K)	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

FINAL UNIT (X45-366X-XX)
DISPLAY UNIT (X54-3410-00)

Ref. No.	Address	New parts	Parts No.	Description	Destination
W501-506			R92-0150-05	JUMPER REST 0 OHM	
K101,102			S51-1420-05	RELAY	
K151,152			S51-1420-05	RELAY	
K201,202			S51-1420-05	RELAY	
K251,252			S51-1420-05	RELAY	
K301,302			S51-1420-05	RELAY	
K351,352			S51-1420-05	RELAY	
K401,402			S76-0401-05	RELAY	
K451			S51-1420-05	RELAY	
K452			S76-0401-05	RELAY	
K501			S51-1429-05	RELAY	
K502			S76-0424-05	RELAY	
D2,3			MA27-B	VARISTOR	
D4			1SS355	DIODE	
D5			ZSH5MA27	SURGE ABSORBER	
D6			1SS355	DIODE	
D101			1SS355	DIODE	
D151			1SS355	DIODE	
D201			1SS355	DIODE	
D251			1SS355	DIODE	
D301			1SS355	DIODE	
D351			1SS355	DIODE	
D401			1SS355	DIODE	
D451			1SS355	DIODE	
D501,502			1SS348	DIODE	
D503,504			1SS355	DIODE	
D505,506			DSA301LA	DIODE	
D802,803			MA27-B	VARISTOR	
D806			ZSH5MA27	SURGE ABSORBER	
D807			1SS348	DIODE	
IC1			TA7805F	MOS IC	
IC2,3			TA7808F	ANALOG IC	
IC501			BU2099FV	MOS IC	
Q1			2SK2596	FET	
Q2			2SK2595	FET	
Q3			2SC3421(Y)	TRANSISTOR	
Q4,5			2SC2782	TRANSISTOR	
Q6		✻	SI7445DP	FET	
Q7			DTC114EKA	DIGITAL TRANSISTOR	
Q8,9			2SD1757K	TRANSISTOR	
Q501-505			FMA5A	TRANSISTOR	
Q506			RN47A5	TRANSISTOR	
Q803			2SC3421(Y)	TRANSISTOR	
Q804,805			2SC2782	TRANSISTOR	
Q806		✻	SI7445DP	FET	
Q807			DTC114EKA	DIGITAL TRANSISTOR	
TH1,2			157-153-53002	THERMISTOR	
-			212-1021-05	INSULATING TUBE	

DISPLAY UNIT (X54-3410-00)

201	2G	✻	B11-1801-03	ILLUMINATION GUIDE	
202	2H	✻	B11-1802-14	FILTER	
203	2G	✻	B11-1803-04	FILTER	
204	2G	✻	B38-0879-05	LCD	
D1-4		✻	B30-2270-05	LED (YELLOW)	
D10-13		✻	B30-2270-05	LED (YELLOW)	

Ref. No.	Address	New parts	Parts No.	Description	Destination
D14		✻	B30-2276-05	LED (R)	
D15			B30-2167-05	LED (GR)	
D16-36			B30-2269-05	LED (YELLOW)	
C1			CK73GB1C104K	CHIP C 0.10UF K	
C2,3			CK73GB1H103K	CHIP C 0.010UF K	
C4			CK73GB1H102K	CHIP C 1000PF K	
C5			CK73GB1C104K	CHIP C 0.10UF K	
C6,7			CK73GB1H103K	CHIP C 0.010UF K	
C8,9			CK73GB1H102K	CHIP C 1000PF K	
C15			C92-0041-05	CHIP-ELE 10UF 10WV	
C16,17			CK73GB1C104K	CHIP C 0.10UF K	
C18			C92-0041-05	CHIP-ELE 10UF 10WV	
C19,20			CK73GB1C104K	CHIP C 0.10UF K	
C21,22			CC73GCH1H220J	CHIP C 22PF J	
C23			CK73GB1H102K	CHIP C 1000PF K	
C24			CK73GB1H103K	CHIP C 0.010UF K	
C25			C92-0698-05	ELECTRO 47UF 16WV	
C26			C92-0004-05	CHIP-TAN 1.0UF 16WV	
C27,28			CC73GCH1H101J	CHIP C 100PF J	
C29			CK73GB1C104K	CHIP C 0.10UF K	
C30			CK73GB1H103K	CHIP C 0.010UF K	
C31-33			CK73FB1C105K	CHIP C 1.0UF K	
C34-39			CK73GB1H102K	CHIP C 1000PF K	
C41-44			CK73GB1H102K	CHIP C 1000PF K	
C45,46			CK73FB1C105K	CHIP C 1.0UF K	
C47			CK73GB1C104K	CHIP C 0.10UF K	
205	2G	✻	E29-1198-04	INTER CONNECTOR	
CN2			E40-3237-05	PIN ASSY	
CN3,4			E40-5392-05	PIN ASSY	
CN5			E40-3239-05	PIN ASSY	
CN6,7			E40-5409-05	PIN ASSY	
J1		✻	E11-0482-05	3.5D PHONE JACK	
J2		✻	E58-0506-05	MODULAR JACK	
206	2G	✻	G13-1949-04	CUSHION	
207	2G	✻	J21-8450-03	HARDWARE FIXTURE	
L1,2			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L3			L92-0552-05	FERRITE CHIP	
L5-7			L92-0552-05	FERRITE CHIP	
L8			L33-0742-05	SMALL FIXED INDUCTOR	
X1			L77-1814-05	CRYSTAL RESONATOR (11.0592MHZ)	
CP1,2			RK75GB1J103J	CHIP-COM 10K J 1/16W	
CP3-5			RK75GB1J473J	CHIP-COM 47K J 1/16W	
R1			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R2			RK73FB2A121J	CHIP R 120 J 1/10W	
R3,4			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R5			RK73GB1J473J	CHIP R 47K J 1/16W	
R6			RK73FB2A390J	CHIP R 39 J 1/10W	
R7			RK73FB2A5R6J	CHIP R 5.6 J 1/10W	
R8			R92-0670-05	CHIP R 0 OHM	
R9,10			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R11,12			RK73FB2A560J	CHIP R 56 J 1/10W	
R13			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R14			RK73GB1J473J	CHIP R 47K J 1/16W	
R15-19			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R20,21			R92-1252-05	CHIP R 0 OHM J 1/16W	
R22			RK73GB1J103J	CHIP R 10K J 1/16W	
R23			RK73FB2A271J	CHIP R 270 J 1/10W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

DISPLAY UNIT (X54-3410-00)
TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
R25			RK73FB2A221J	CHIP R 220 J 1/10W	
R26			RK73GB1J473J	CHIP R 47K J 1/16W	
R27			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R28			RK73GB1J473J	CHIP R 47K J 1/16W	
R29			R92-1252-05	CHIP R 0 OHM J 1/16W	
R30-33			RK73GB1J473J	CHIP R 47K J 1/16W	
R34			RK73FB2A152J	CHIP R 1.5K J 1/10W	
R35			RK73FB2A181J	CHIP R 180 J 1/10W	
R36			RK73FB2A331J	CHIP R 330 J 1/10W	
R37			RK73FB2A181J	CHIP R 180 J 1/10W	
R38			RK73GB1J103J	CHIP R 10K J 1/16W	
R39			RK73FB2A392J	CHIP R 3.9K J 1/10W	
R40			RK73FB2A681J	CHIP R 680 J 1/10W	
R41,42			RK73GB1J101J	CHIP R 100 J 1/16W	
R43-45			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R47-50			RK73GB1J101J	CHIP R 100 J 1/16W	
R51-54			RK73GB1J473J	CHIP R 47K J 1/16W	
R55,56			R92-1205-05	CHIP R 120 J 1/4W	
R57			RK73GB1J473J	CHIP R 47K J 1/16W	
R58			RK73GB1J104J	CHIP R 100K J 1/16W	
R59,60			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R62			R92-0670-05	CHIP R 0 OHM	
R63			RK73FB2A122J	CHIP R 1.2K J 1/10W	
VR1		✻	R31-0645-05	VARIABLE RESISTOR	
VR2		✻	R31-0644-05	VARIABLE RESISTOR	
S1-33		✻	S70-0490-05	TACT SWITCH	
S35		✻	S70-0490-05	TACT SWITCH	
D5-9			MA2S111	DIODE	
D37			MA2S111	DIODE	
IC1,2			LC75823W	MOS IC	
IC3		✻	30622M8A-7N0GP	MCU	
IC4,5			TC4S81F	MOS IC	
IC6			L78LR05B-FA	MOS IC (SIP/5P/16)	
Q1-6			DTC114EE	DIGITAL TRANSISTOR	
Q7			2SA1162(Y)	TRANSISTOR	
S34		✻	W02-3662-05	ENCODER	

TX-RX UNIT (X57-663X-XX)
0-11 : KH 0-12 : KS 2-71 : EH 2-72 : ES

Ref. No.	Address	New parts	Parts No.	Description	Destination
D621			B30-2001-05	LED (RE/MEN/8)	
C1			CC73GCH1H080B	CHIP C 8.0PF B	
C2			CC73GCH1H151J	CHIP C 150PF J	
C3			CC73GCH1H390J	CHIP C 39PF J	
C4			C92-0628-05	CHIP-TAN 10UF 10WV	
C5			CK73GB1H472K	CHIP C 4700PF K	
C6			CK73GB1C473K	CHIP C 0.047UF K	
C8			CK73GB1H103K	CHIP C 0.010UF K	
C9			CC73GCH1H050B	CHIP C 5.0PF B	
C10			CK73GB1C473K	CHIP C 0.047UF K	
C11			CK73GB1H103K	CHIP C 0.010UF K	
C12			CK73GB1C473K	CHIP C 0.047UF K	
C14,15			CK73GB1C473K	CHIP C 0.047UF K	
C16			CC73GCH1H470J	CHIP C 47PF J	
C17			CK73GB1C473K	CHIP C 0.047UF K	
C18			CK73GB1H103K	CHIP C 0.010UF K	
C19			CC73GCH1H470J	CHIP C 47PF J	
C20,21			C92-0628-05	CHIP-TAN 10UF 10WV	
C22			CK73GB1C473K	CHIP C 0.047UF K	
C23			CK73GB1H102K	CHIP C 1000PF K	
C24			CK73GB1H472K	CHIP C 4700PF K	
C25,26			CK73GB1C473K	CHIP C 0.047UF K	
C28			CC73GCH1H390J	CHIP C 39PF J	
C29			CK73GB1H103K	CHIP C 0.010UF K	
C30			CK73GB1C473K	CHIP C 0.047UF K	
C31			CK73GB1H103K	CHIP C 0.010UF K	
C32			CK73GB1C473K	CHIP C 0.047UF K	
C33			CC73GCH1H040B	CHIP C 4.0PF B	
C34			CC73GCH1H390J	CHIP C 39PF J	
C35,36			CC73GCH1H331J	CHIP C 330PF J	
C37			CK73GB1A105K	CHIP C 1.0UF K	
C38			CK73GB1C473K	CHIP C 0.047UF K	
C39			CK73GB1H103K	CHIP C 0.010UF K	
C40			CC73GCH1H221J	CHIP C 220PF J	
C41			CC73GCH1H100D	CHIP C 10PF D	
C42			CK73GB1C473K	CHIP C 0.047UF K	
C43			C92-0628-05	CHIP-TAN 10UF 10WV	
C44			CK73GB1C473K	CHIP C 0.047UF K	
C46			CK73GB1C473K	CHIP C 0.047UF K	
C47			CK73GB1H103K	CHIP C 0.010UF K	
C48			CK73GB1H102K	CHIP C 1000PF K	
C49-52			CK73GB1C473K	CHIP C 0.047UF K	
C53			CK73GB1H103K	CHIP C 0.010UF K	
C54,55			CK73GB1C473K	CHIP C 0.047UF K	
C56			CK73GB1H391K	CHIP C 390PF K	
C57			CK73GB1H471K	CHIP C 470PF K	
C58			CK73GB1H102K	CHIP C 1000PF K	
C59			CC73GCH1H680J	CHIP C 68PF J	
C60			CC73GCH1H330J	CHIP C 33PF J	
C61			CC73GCH1H270J	CHIP C 27PF J	
C62			CK73GB1H561K	CHIP C 560PF K	
C63			CK73GB1H681K	CHIP C 680PF K	
C64,65			CC73GCH1H820J	CHIP C 82PF J	
C66			CC73GCH1H120J	CHIP C 12PF J	
C67			CC73GCH1H271J	CHIP C 270PF J	
C68			CC73GCH1H331J	CHIP C 330PF J	
C69			CK73GB1H391K	CHIP C 390PF K	
C70			CC73GCH1H080B	CHIP C 8.0PF B	
C71			CC73GCH1H271J	CHIP C 270PF J	
C72			CK73GB1H102K	CHIP C 1000PF K	
C73			CC73GCH1H560J	CHIP C 56PF J	
C74			CK73GB1C473K	CHIP C 0.047UF K	
C75			CC73GCH1H120J	CHIP C 12PF J	
C76			C92-0628-05	CHIP-TAN 10UF 10WV	
C77			CC73GCH1H680J	CHIP C 68PF J	
C78			CK73GB1H102K	CHIP C 1000PF K	
C79			CK73GB1C473K	CHIP C 0.047UF K	
C80			CK73GB1H102K	CHIP C 1000PF K	
C81			CC73GCH1H220J	CHIP C 22PF J	
C83			CC73GCH1H180J	CHIP C 18PF J	
C84			CC73GCH1H100D	CHIP C 10PF D	
C85			CK73GB1C473K	CHIP C 0.047UF K	
C86			CC73GCH1H470J	CHIP C 47PF J	
C87			C92-0628-05	CHIP-TAN 10UF 10WV	
C88			CK73GB1H472K	CHIP C 4700PF K	
C89			CK73GB1H102K	CHIP C 1000PF K	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description			Destination
C90			CC73GCH1H120J	CHIP C	12PF	J	
C91			CK73GB1H472K	CHIP C	4700PF	K	
C92			CC73GCH1H240J	CHIP C	24PF	J	
C93			CC73GCH1H220J	CHIP C	22PF	J	
C94			C92-0001-05	CHIP C	0.1UF	35WV	
C95			CK73GB1H472K	CHIP C	4700PF	K	
C96,97			CK73GB1H102K	CHIP C	1000PF	K	
C98			CK73GB1C104K	CHIP C	0.10UF	K	
C99			C92-0628-05	CHIP-TAN	10UF	10WV	
C100			CK73GB1H472K	CHIP C	4700PF	K	
C101			CK73GB1H102K	CHIP C	1000PF	K	
C102			CK73GB1C333J	CHIP C	0.033UF	J	
C103			CK73GB1H102K	CHIP C	1000PF	K	
C104			CK73GB1H472K	CHIP C	4700PF	K	
C105			C92-0041-05	CHIP-ELE	10UF	10WV	
C106			C92-0653-05	CHIP-TAN	0.68UF	10WV	
C107			CK73GB1H472K	CHIP C	4700PF	K	
C108			C92-0628-05	CHIP-TAN	10UF	10WV	
C115			CK73GB1C223K	CHIP C	0.022UF	K	
C116			CK73GB1H103K	CHIP C	0.010UF	K	
C117			CK73GB1C104K	CHIP C	0.10UF	K	
C118,119			CK73GB1H103K	CHIP C	0.010UF	K	
C120			CC73GCH1H101J	CHIP C	100PF	J	
C121			CC73GCH1H151J	CHIP C	150PF	J	
C122,123			CK73GB1H103K	CHIP C	0.010UF	K	
C124			CK73GB1C473K	CHIP C	0.047UF	K	
C131-133			CK73GB1H102K	CHIP C	1000PF	K	
C134,135			CK73GB1H103K	CHIP C	0.010UF	K	
C136-138			CK73GB1H102K	CHIP C	1000PF	K	
C139			CK73GB1C104K	CHIP C	0.10UF	K	
C140			CK45FE2H222P	CERAMIC	2200PF	P	
C141			CK73GB1A105K	CHIP C	1.0UF	K	
C142			CK73GB1H102K	CHIP C	1000PF	K	
C143			CK73GB1A105K	CHIP C	1.0UF	K	
C144			CK73GB1H103K	CHIP C	0.010UF	K	
C145			C92-0628-05	CHIP-TAN	10UF	10WV	
C146,147			CK73GB1A105K	CHIP C	1.0UF	K	
C148			C92-0628-05	CHIP-TAN	10UF	10WV	
C149			CK73GB1A105K	CHIP C	1.0UF	K	
C150,151			CK73GB1H103K	CHIP C	0.010UF	K	
C152			CK73FB1E104K	CHIP C	0.10UF	K	
C153			CK73GB1H102K	CHIP C	1000PF	K	
C171-175			CC73GCH1H101J	CHIP C	100PF	J	
C176-187			CK73GB1H102K	CHIP C	1000PF	K	
C188			CK73GB1C104K	CHIP C	0.10UF	K	
C189-194			CC73GCH1H101J	CHIP C	100PF	J	
C196,197			CK73GB1H102K	CHIP C	1000PF	K	
C201,202			CK73GB1H102K	CHIP C	1000PF	K	
C203-206			CK73FB1C105K	CHIP C	1.0UF	K	
C207			CK73GB1H102K	CHIP C	1000PF	K	
C208,209			CK73GB1H103K	CHIP C	0.010UF	K	
C210-212			CK73GB1H102K	CHIP C	1000PF	K	
C214		✻	C90-4112-05	ELECTRO	100UF	16WV	
C217,218			CK73GB1H103K	CHIP C	0.010UF	K	
C220,221			CK73FB1C105K	CHIP C	1.0UF	K	
C222,223			CK73GB1H102K	CHIP C	1000PF	K	
C224-226			CK73GB1H103K	CHIP C	0.010UF	K	
C227,228			CC73GCH1H220J	CHIP C	22PF	J	
C229,230			CK73GB1H103K	CHIP C	0.010UF	K	
C232-237			CK73GB1H103K	CHIP C	0.010UF	K	

Ref. No.	Address	New parts	Parts No.	Description			Destination
C238			C92-0562-05	CHIP-ELE	330UF	6.3WV	
C239-241			CK73GB1C104K	CHIP C	0.10UF	K	
C242			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C243			CK73GB1H103K	CHIP C	0.010UF	K	
C244,245			CK73GB1C104K	CHIP C	0.10UF	K	
C246			C92-0562-05	CHIP-ELE	330UF	6.3WV	
C247			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C248			CK73GB1C104K	CHIP C	0.10UF	K	
C249			CK73GB1H822K	CHIP C	8200PF	K	
C250			CK73GB1H102K	CHIP C	1000PF	K	
C251			CK73GB1A105K	CHIP C	1.0UF	K	
C252			C92-0041-05	CHIP-ELE	10UF	10WV	
C253			CK73GB1C104K	CHIP C	0.10UF	K	
C254			C92-0041-05	CHIP-ELE	10UF	10WV	
C255			CK73GB1C104K	CHIP C	0.10UF	K	
C256			CK73GB1H103K	CHIP C	0.010UF	K	
C257			CK73GB1C104K	CHIP C	0.10UF	K	
C258			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C259			CK73GB1H103K	CHIP C	0.010UF	K	
C260			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C261			CK73GB1C104K	CHIP C	0.10UF	K	
C262			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C263			CK73GB1A105K	CHIP C	1.0UF	K	
C264			CK73GB1H822K	CHIP C	8200PF	K	
C265			CK73GB1H102K	CHIP C	1000PF	K	
C266			CK73GB1H103K	CHIP C	0.010UF	K	
C267			CK73GB1A105K	CHIP C	1.0UF	K	
C268			CK73GB1H103K	CHIP C	0.010UF	K	
C269			CK73GB1C104K	CHIP C	0.10UF	K	
C270			CK73GB1H103K	CHIP C	0.010UF	K	
C271			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C272			CK73GB1A105K	CHIP C	1.0UF	K	
C273			CK73GB1H272K	CHIP C	2700PF	K	
C274			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C275			CK73GB1H471K	CHIP C	470PF	K	
C276			CK73GB1A105K	CHIP C	1.0UF	K	
C279			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C280			CK73GB1C104K	CHIP C	0.10UF	K	
C281			C92-0048-05	ELECTRO	100UF	6.3WV	
C282,283			CK73GB1C104K	CHIP C	0.10UF	K	
C284,285			CK73GB1H103K	CHIP C	0.010UF	K	
C286			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C287			C92-0048-05	ELECTRO	100UF	6.3WV	
C288			CK73GB1C104K	CHIP C	0.10UF	K	
C289			CK73GB1H103K	CHIP C	0.010UF	K	
C290			CK73GB1A105K	CHIP C	1.0UF	K	
C291			CK73GB1H471K	CHIP C	470PF	K	
C292			CK73GB1A105K	CHIP C	1.0UF	K	
C293			CK73GB1H272K	CHIP C	2700PF	K	
C294			CK73GB1H103K	CHIP C	0.010UF	K	
C295,296			CK73GB1C104K	CHIP C	0.10UF	K	
C297			CK73GB1H103K	CHIP C	0.010UF	K	
C298,299			CK73GB1C104K	CHIP C	0.10UF	K	
C300			CK73GB1H103K	CHIP C	0.010UF	K	
C301,302			CK73GB1C104K	CHIP C	0.10UF	K	
C303			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C304,305			CK73GB1E223K	CHIP C	0.022UF	K	
C306			CK73GB1H103K	CHIP C	0.010UF	K	
C307			CK73GB1C104K	CHIP C	0.10UF	K	
C308			CK73GB1H102K	CHIP C	1000PF	K	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
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PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description			Destination
C309,310			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C311			C92-0004-05	CHIP-TAN	1.0UF	16WV	
C312			CK73GB1C104K	CHIP C	0.10UF	K	
C313			CK73GB1H103K	CHIP C	0.010UF	K	
C314			CC73GCH1H101J	CHIP C	100PF	J	
C315,316			CK73GB1H103K	CHIP C	0.010UF	K	
C317,318			CC73GCH1H270J	CHIP C	27PF	J	
C320			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C321			CK73GB1C104K	CHIP C	0.10UF	K	
C322			CK73GB1A105K	CHIP C	1.0UF	K	
C323			CK73GB1H103K	CHIP C	0.010UF	K	
C324			CK73GB1C104K	CHIP C	0.10UF	K	
C325			CK73FB1C105K	CHIP C	1.0UF	K	
C326			CK73GB1A105K	CHIP C	1.0UF	K	
C327			CK73GB1H103K	CHIP C	0.010UF	K	
C328			CK73GB1A105K	CHIP C	1.0UF	K	
C329			CK73GB1H103K	CHIP C	0.010UF	K	
C351-356			CK73GB1H103K	CHIP C	0.010UF	K	
C357-359			CC73GCH1H101J	CHIP C	100PF	J	
C360			CK73GB1H103K	CHIP C	0.010UF	K	
C362			CK73GB1C104K	CHIP C	0.10UF	K	
C363-366			CK73GB1H103K	CHIP C	0.010UF	K	
C367			CK73GB1H102K	CHIP C	1000PF	K	
C368-374			CK73GB1C104K	CHIP C	0.10UF	K	
C375-379			CC73GCH1H101J	CHIP C	100PF	J	
C382			CK73GB1H103K	CHIP C	0.010UF	K	
C383,384			CK73GB1H102K	CHIP C	1000PF	K	
C385			CK73GB1A105K	CHIP C	1.0UF	K	
C386			CC73GCH1H101J	CHIP C	100PF	J	
C387			CK73GB1A105K	CHIP C	1.0UF	K	
C388			CC73GCH1H101J	CHIP C	100PF	J	
C389			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C390-393			CC73GCH1H101J	CHIP C	100PF	J	
C394,395			CK73GB1H102K	CHIP C	1000PF	K	
C397-404			CK73GB1H102K	CHIP C	1000PF	K	
C405-407			CC73GCH1H101J	CHIP C	100PF	J	
C408-410			CK73GB1C104K	CHIP C	0.10UF	K	
C411,412			CK73GB1H103K	CHIP C	0.010UF	K	
C413			CK73GB1H102K	CHIP C	1000PF	K	
C414			C92-0041-05	CHIP-ELE	10UF	10WV	
C415-417			CK73GB1H102K	CHIP C	1000PF	K	
C418,419			CK73GB1C104K	CHIP C	0.10UF	K	
C420		✻	C90-4114-05	ELECTRO	470UF	16WV	
C451			CC73GCH1H121J	CHIP C	120PF	J	
C452			CC73GCH1H820J	CHIP C	82PF	J	
C453			CC73GCH1H060B	CHIP C	6.0PF	B	
C455,456			CK73GB1C473K	CHIP C	0.047UF	K	
C457,458			CK73GB1A105K	CHIP C	1.0UF	K	
C459			CC73GCH1H180J	CHIP C	18PF	J	
C460			CC73GCH1H120J	CHIP C	12PF	J	
C461			CC73GCH1H330J	CHIP C	33PF	J	
C462			CC73GCH1H270J	CHIP C	27PF	J	
C463,464			CC73GCH1H150J	CHIP C	15PF	J	
C465			CK73GB1H103K	CHIP C	0.010UF	K	
C466,467			CC73GCH1H100D	CHIP C	10PF	D	
C468,469			CK73GB1H103K	CHIP C	0.010UF	K	
C470			CK73GB1H472K	CHIP C	4700PF	K	
C471			CK73GB1H102K	CHIP C	1000PF	K	
C472			CK73GB1H472K	CHIP C	4700PF	K	
C473			CC73GCH1H470J	CHIP C	47PF	J	

Ref. No.	Address	New parts	Parts No.	Description			Destination
C474			CK73GB1C473K	CHIP C	0.047UF	K	
C476			CK73GB1H472K	CHIP C	4700PF	K	
C477			CC73GCH1H101J	CHIP C	100PF	J	
C478			CK73GB1H102K	CHIP C	1000PF	K	
C479			CC73GCH1H100D	CHIP C	10PF	D	
C480			CK73GB1A105K	CHIP C	1.0UF	K	
C481			CC73GCH1H270J	CHIP C	27PF	J	
C482			CC73GCH1H220J	CHIP C	22PF	J	
C483			CC73GCH1H120J	CHIP C	12PF	J	
C484			CC73GCH1H150J	CHIP C	15PF	J	
C485			CC73GCH1H270J	CHIP C	27PF	J	
C486			CC73GCH1H100D	CHIP C	10PF	D	
C487			CK73GB1H103K	CHIP C	0.010UF	K	
C488			CK73GB1H102K	CHIP C	1000PF	K	
C501			CK73GB1H103K	CHIP C	0.010UF	K	
C502			CC73GCH1H100D	CHIP C	10PF	D	
C503			CC73GCH1H020B	CHIP C	2.0PF	B	
C504,505			CK73GB1H103K	CHIP C	0.010UF	K	
C506			CC73GCH1H470J	CHIP C	47PF	J	
C507			CK73GB1H103K	CHIP C	0.010UF	K	
C508			CC73GCH1H470J	CHIP C	47PF	J	
C509			CK73GB1H103K	CHIP C	0.010UF	K	
C511			C92-0003-05	CHIP-TAN	0.47UF	25WV	
C512			CK73GB1H103K	CHIP C	0.010UF	K	
C514,515			CK73GB1H103K	CHIP C	0.010UF	K	
C517,518			CK73GB1H103K	CHIP C	0.010UF	K	
C519			CK73GB1H102K	CHIP C	1000PF	K	
C521			CK73GB1A105K	CHIP C	1.0UF	K	
C522			CC73GCH1H100D	CHIP C	10PF	D	
C523,524			CK73GB1H103K	CHIP C	0.010UF	K	
C525			CK73GB1H102K	CHIP C	1000PF	K	
C526			C92-0628-05	CHIP-TAN	10UF	10WV	
C527			CE04EW1E470M	ELECTRO	47UF	25WV	
C528			CK73GB1H103K	CHIP C	0.010UF	K	
C529			CC73GCH1H470J	CHIP C	47PF	J	
C551,552			CK73GB1C104K	CHIP C	0.10UF	K	
C553			CC73GCH1H270J	CHIP C	27PF	J	
C554			CK73GB1C104K	CHIP C	0.10UF	K	
C555,556			CC73GCH1H271J	CHIP C	270PF	J	
C557			CC73GCH1H391J	CHIP C	390PF	J	
C558			CK73GB1H103K	CHIP C	0.010UF	K	
C559			C92-0628-05	CHIP-TAN	10UF	10WV	
C560			CK73GB1C104K	CHIP C	0.10UF	K	
C561,562			CK73GB1H103K	CHIP C	0.010UF	K	
C563			CK73GB1C104K	CHIP C	0.10UF	K	
C564-566			CK73GB1H103K	CHIP C	0.010UF	K	
C567			CC73GCH1H390J	CHIP C	39PF	J	
C568-570			CK73GB1H103K	CHIP C	0.010UF	K	
C571			CK73GB1H102K	CHIP C	1000PF	K	
C572			CC73GCH1H050B	CHIP C	5.0PF	B	
C573			CC73GCH1H221J	CHIP C	220PF	J	
C574			CK73GB1H103K	CHIP C	0.010UF	K	
C575			CC73GCH1H390J	CHIP C	39PF	J	
C576,577			CK73GB1H103K	CHIP C	0.010UF	K	
C579			CC73GCH1H150J	CHIP C	15PF	J	
C581			CC73GCH1H470J	CHIP C	47PF	J	
C582			CK73GB1H102K	CHIP C	1000PF	K	
C583			CC73GCH1H030B	CHIP C	3.0PF	B	
C584			CC73GCH1H470J	CHIP C	47PF	J	
C585,586			CK73GB1C104K	CHIP C	0.10UF	K	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
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Ref. No.	Address	New parts	Parts No.	Description			Destination
C587			CC73GCH1H221J	CHIP C	220PF	J	
C588			CK73GB1C104K	CHIP C	0.10UF	K	
C589			CC73GCH1H101J	CHIP C	100PF	J	
C590			CK73GB1C104K	CHIP C	0.10UF	K	
C591			C92-0665-05	TANTAL	100UF	6.3WV	
C592			CK73GB1H102K	CHIP C	1000PF	K	
C593			CK73GB1H103K	CHIP C	0.010UF	K	
C594-596			CK73GB1A105K	CHIP C	1.0UF	K	
C597			CK73GB1H103K	CHIP C	0.010UF	K	
C599			CK73GB1C104K	CHIP C	0.10UF	K	
C600,601			CK73GB1A105K	CHIP C	1.0UF	K	
C602,603			CK73GB1C104K	CHIP C	0.10UF	K	
C604			CC73GCH1H220J	CHIP C	22PF	J	
C622-624			CK73GB1H103K	CHIP C	0.010UF	K	
C625			CK73GB1C104K	CHIP C	0.10UF	K	
C626			CK73GB1H102K	CHIP C	1000PF	K	
C627,628			CK73GB1H103K	CHIP C	0.010UF	K	
C629-631			CK73GB1C104K	CHIP C	0.10UF	K	
C632			C92-0694-05	TANTAL	10UF	16WV	
C633,634			CK73GB1C104K	CHIP C	0.10UF	K	
C635			C92-0694-05	TANTAL	10UF	16WV	
C636-638			CK73GB1C104K	CHIP C	0.10UF	K	
C639			C92-0694-05	TANTAL	10UF	16WV	
C640,641			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C642			C92-0694-05	TANTAL	10UF	16WV	
C643			CK73GB1C104K	CHIP C	0.10UF	K	
C644			CK73GB1A105K	CHIP C	1.0UF	K	
C681			C92-0005-05	CHIP-TAN	2.2UF	6.3WV	
C682			C92-0628-05	CHIP-TAN	10UF	10WV	
C685			CK73GB1H103K	CHIP C	0.010UF	K	
C686			C92-0002-05	CHIP-TAN	0.22UF	35WV	
C687			CK73GB1H103K	CHIP C	0.010UF	K	
C688			C92-0004-05	CHIP-TAN	1.0UF	16WV	
C689			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C690			C92-0507-05	CHIP-TAN	4.7UF	6.3WV	
C691			CK73GB1H102K	CHIP C	1000PF	K	
C692			CK73GB1C104K	CHIP C	0.10UF	K	
C693			CK73GB1H471K	CHIP C	470PF	K	
C694			CK73GB1H103K	CHIP C	0.010UF	K	
C695			C92-0561-05	CHIP-ELE	22UF	16WV	
C696			CK73GB1C104K	CHIP C	0.10UF	K	
C697			CK73GB1C473K	CHIP C	0.047UF	K	
C698			CK73GB1H102K	CHIP C	1000PF	K	
C699			CK73GB1A105K	CHIP C	1.0UF	K	
C700			CK73GB1H103K	CHIP C	0.010UF	K	
C701-705			CK73GB1C104K	CHIP C	0.10UF	K	
C706,707			CK73GB1A105K	CHIP C	1.0UF	K	
C731,732			CK73GB1H103K	CHIP C	0.010UF	K	
C733-736			CK73GB1C104K	CHIP C	0.10UF	K	
C737			CK73GB1H103K	CHIP C	0.010UF	K	
C738,739			CK73GB1C104K	CHIP C	0.10UF	K	
C741,742			CK73GB1A105K	CHIP C	1.0UF	K	
C744		✻	C90-4113-05	ELECTRO	220UF	16WV	
C745,746			CK73GB1A105K	CHIP C	1.0UF	K	
C747			CK73GB1H103K	CHIP C	0.010UF	K	
C749			CK73GB1H103K	CHIP C	0.010UF	K	
C750,751			CE04EW1C470M	ELECTRO	47UF	16WV	
C752		✻	C90-4111-05	ELECTRO	470UF	16WV	
C753			CK73FB1E104K	CHIP C	0.10UF	K	
C754		✻	C90-4114-05	ELECTRO	470UF	16WV	

Ref. No.	Address	New parts	Parts No.	Description			Destination
C755			CE04EW1E4R7M	ELECTRO	4.7UF	25WV	
C756		✻	C90-4112-05	ELECTRO	100UF	16WV	
C757			CK73FB1E104K	CHIP C	0.10UF	K	
C758			CK73GB1H103K	CHIP C	0.010UF	K	
C759			CK73FB1E104K	CHIP C	0.10UF	K	
C760			CK73FB1C105K	CHIP C	1.0UF	K	
C761,762			CK73FB1E104K	CHIP C	0.10UF	K	
C763,764			CK73GB1A105K	CHIP C	1.0UF	K	
C801-804			CK73GB1H102K	CHIP C	1000PF	K	
C805,806			CK73GB1C104K	CHIP C	0.10UF	K	
C807			CK73GB1H102K	CHIP C	1000PF	K	
C808			C92-0628-05	CHIP-TAN	10UF	10WV	
C809			CK73GB1H103K	CHIP C	0.010UF	K	
C810			CC73GCH1H330J	CHIP C	33PF	J	
C811			CK73GB1H103K	CHIP C	0.010UF	K	
C812			C92-0560-05	CHIP-TAN	10UF	6.3WV	
C813			CK73GB1H103K	CHIP C	0.010UF	K	
C814			CC73GCH1H101J	CHIP C	100PF	J	
C817,818			CK73GB1H103K	CHIP C	0.010UF	K	
C821			C92-0628-05	CHIP-TAN	10UF	10WV	
C822			CC73GCH1H150J	CHIP C	15PF	J	
C901-904			CK73GB1H103K	CHIP C	0.010UF	K	
C905			CC73GCH1H101J	CHIP C	100PF	J	
C906			CK73GB1H103K	CHIP C	0.010UF	K	
C907			CC73GCH1H220J	CHIP C	22PF	J	
C908,909			CK73GB1H103K	CHIP C	0.010UF	K	
C911			CK73GB1H102K	CHIP C	1000PF	K	
C913-916			CK73GB1H103K	CHIP C	0.010UF	K	
C923,924			CK73GB1H103K	CHIP C	0.010UF	K	
C925			CC73GCH1H050B	CHIP C	5.0PF	B	
C926			CK73GB1H103K	CHIP C	0.010UF	K	
C927			CC73GCH1H101J	CHIP C	100PF	J	
C928			CC73GCH1H560J	CHIP C	56PF	J	
C931-938			CK73GB1H103K	CHIP C	0.010UF	K	
C943			CC73GCH1H200J	CHIP C	20PF	J	
C944			CK73GB1H103K	CHIP C	0.010UF	K	
C949-959			CK73GB1H103K	CHIP C	0.010UF	K	
C960,961			CC73GCH1H100D	CHIP C	10PF	D	
C962			CC73GCH1H050B	CHIP C	5.0PF	B	
C972			CK73GB1H103K	CHIP C	0.010UF	K	
C973			CE04EW1C100M	ELECTRO	10UF	16WV	
C974			CK73GB1C473K	CHIP C	0.047UF	K	
C975			CK73GB1H103K	CHIP C	0.010UF	K	
C977			CC73GCH1H100D	CHIP C	10PF	D	
C978-980			CK73GB1H103K	CHIP C	0.010UF	K	
C981			CK73GB1C473K	CHIP C	0.047UF	K	
C982,983			CC73GCH1H050B	CHIP C	5.0PF	B	
C984			CK73GB1H103K	CHIP C	0.010UF	K	
C985			CC73GCH1H470J	CHIP C	47PF	J	
TC1			C05-0384-05	CERAMIC TRIMMER CAP (10PF)			
TC451-453			C05-0384-05	CERAMIC TRIMMER CAP (10PF)			
CN1			E04-0191-05	PIN SOCKET			
CN3			E04-0191-05	PIN SOCKET			
CN359			E40-5978-05	FLAT CABLE CONNECTOR			
CN369			E40-3252-05	PIN ASSY			
CN375			E40-5758-05	FLAT CABLE CONNECTOR			
CN382			E40-3247-05	PIN ASSY			
CN390		✻	E40-6357-05	PIN ASSY			
CN403			E40-5978-05	FLAT CABLE CONNECTOR			

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PARTS LIST

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Ref. No.	Address	New parts	Parts No.	Description	Destination
CN501			E04-0191-05	PIN SOCKET	
CN554		✻	E40-6267-05	PIN ASSY	
CN555		✻	E40-6273-05	PIN ASSY	
CN901		✻	E40-6266-05	PIN ASSY	
CN971		✻	E40-6272-05	PIN ASSY	
J131		✻	E56-0411-05	DIN SOCKET	
J132			E56-0405-05	DIN SOCKET	
J201			E58-0435-05	SUB SOCKET (D)	
J202		✻	E58-0506-05	MODULAR JACK	
J351		✻	E58-0507-05	MODULAR JACK	
J731			E11-0414-05	3.5D PHONE JACK (3P)	
W501		✻	E37-1058-05	LEAD WIRE WITH CONNECTOR	
-		✻	F10-2458-04	SHIELDING CASE	
-		✻	F10-2459-04	SHIELDING CASE	
-			F20-3320-04	INSULATING SHEET	
CF1			L72-0343-05	CERAMIC FILTER	
CF551			L72-0372-05	CERAMIC FILTER	
L1			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L3			L40-1595-34	SMALL FIXED INDUCTOR (1.5UH)	
L4			L40-2295-34	SMALL FIXED INDUCTOR (2.2UH)	
L5			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L6			L34-4345-05	COIL	
L7		✻	L39-1480-05	TOROIDAL COIL	
L8			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L9			L34-4345-05	COIL	
L10			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L11			L40-2295-34	SMALL FIXED INDUCTOR (2.2UH)	
L12,13			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L14			L40-1085-34	SMALL FIXED INDUCTOR (100NH)	
L15,16			L40-8285-34	SMALL FIXED INDUCTOR (820NH)	
L18			L40-4785-34	SMALL FIXED INDUCTOR (470NH)	
L19			L40-5685-34	SMALL FIXED INDUCTOR (560NH)	
L20			L40-6885-34	SMALL FIXED INDUCTOR (680NH)	
L21			L40-2275-34	SMALL FIXED INDUCTOR (22NH)	
L22			L40-8285-34	SMALL FIXED INDUCTOR (820NH)	
L23		✻	L40-8275-34	SMALL FIXED INDUCTOR (82NH)	
L24			L40-2275-34	SMALL FIXED INDUCTOR (22NH)	
L25			L40-4785-34	SMALL FIXED INDUCTOR (470NH)	
L26		✻	L40-8275-34	SMALL FIXED INDUCTOR (82NH)	
L27			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L28			L40-1085-34	SMALL FIXED INDUCTOR (100NH)	
L29			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L30			L40-3375-34	SMALL FIXED INDUCTOR (33NH)	
L31			L40-3975-34	SMALL FIXED INDUCTOR (39NH)	
L33			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L34			L40-1095-34	SMALL FIXED INDUCTOR (1UH)	
L35			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L132			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L133			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L134			L40-1095-34	SMALL FIXED INDUCTOR (1UH)	
L171,172			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L174			L92-0149-05	FERRITE CHIP	
L175			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L201			L40-3395-34	SMALL FIXED INDUCTOR (3.3UH)	
L202-205			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L207-210			L40-3395-34	SMALL FIXED INDUCTOR (3.3UH)	
L211			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L212			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L217		✻	L41-1005-27	SMALL FIXED INDUCTOR	

Ref. No.	Address	New parts	Parts No.	Description	Destination
L218-220			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L221			L92-0149-05	FERRITE CHIP	
L222		✻	L41-1005-27	SMALL FIXED INDUCTOR	
L223			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L226			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L227		✻	L41-1005-27	SMALL FIXED INDUCTOR	
L228,229			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L351			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L352-357			L92-0149-05	FERRITE CHIP	
L358			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L361-363			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L364		✻	L41-1015-27	SMALL FIXED INDUCTOR	
L365,366			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L451,452		✻	L41-2295-09	SMALL FIXED INDUCTOR	
L453,454			L41-1005-08	SMALL FIXED INDUCTOR	
L455		✻	L41-2288-09	SMALL FIXED INDUCTOR	
L456		✻	L41-1888-09	SMALL FIXED INDUCTOR	
L457,458			L40-2205-34	SMALL FIXED INDUCTOR (22UH)	
L461		✻	L41-2295-09	SMALL FIXED INDUCTOR	
L462			L41-1005-08	SMALL FIXED INDUCTOR	
L463			L40-1095-34	SMALL FIXED INDUCTOR (1UH)	
L464		✻	L41-1588-09	SMALL FIXED INDUCTOR	
L465			L40-2205-34	SMALL FIXED INDUCTOR (22UH)	
L466			L40-3975-34	SMALL FIXED INDUCTOR (39NH)	
L501			L40-1085-34	SMALL FIXED INDUCTOR (100NH)	
L502			L40-2285-34	SMALL FIXED INDUCTOR (220NH)	
L503			L33-0695-05	SMALL FIXED INDUCTOR	
L504			L40-4795-34	SMALL FIXED INDUCTOR (4.7UH)	
L505			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L506,507			L34-4401-05	COIL	
L551			L34-4459-05	COIL	
L552			L40-1085-34	SMALL FIXED INDUCTOR (100NH)	
L553,554		✻	L34-4710-05	COIL	
L556			L40-3305-34	SMALL FIXED INDUCTOR (33UH)	
L558			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L622,623			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L624-626			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L682			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L801			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L901,902			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L903			L40-4795-34	SMALL FIXED INDUCTOR (4.7UH)	
L904			L40-1005-34	SMALL FIXED INDUCTOR (10UH)	
L905,906			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L908,909			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L910			L40-3395-34	SMALL FIXED INDUCTOR (3.3UH)	
L931-936			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L971,972			L40-1015-34	SMALL FIXED INDUCTOR (100UH)	
L974,975			L40-4705-34	SMALL FIXED INDUCTOR (47UH)	
L976			L40-1001-37	SMALL FIXED INDUCTOR (10UH)	
X1		✻	L77-1906-05	CRYSTAL RESONATOR (15.6MHZ)	
X201		✻	L77-1907-05	CRYSTAL RESONATOR (22.1184MHZ)	
X202		✻	L77-1920-05	CRYSTAL RESONATOR (12.288MHZ)	
XF931			L71-0433-15	MCF (10.695MHZ)	
XF932		✻	L71-0604-05	CRYSTAL FILTER (10.695MHZ)	
CP201			RK75GA1J473J	CHIP-COM 47K J 1/16W	
CP202			RK75GB1J473J	CHIP-COM 47K J 1/16W	
CP204			RK75GA1J473J	CHIP-COM 47K J 1/16W	
CP205-207			RK75GB1J102J	CHIP-COM 1.0K J 1/16W	
CP208			RK75GA1J101J	CHIP-COM 100 J 1/16W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description			Destination
CP209,210			RK75GB1J101J	CHIP-COM 100	J	1/16W	
CP211			RK75GA1J101J	CHIP-COM 100	J	1/16W	
CP212			RK75GB1J102J	CHIP-COM 1.0K	J	1/16W	
CP213			RK75GA1J473J	CHIP-COM 47K	J	1/16W	
CP214			RK75GA1J101J	CHIP-COM 100	J	1/16W	
CP215			RK75GB1J101J	CHIP-COM 100	J	1/16W	
CP216,217			RK75GB1J473J	CHIP-COM 47K	J	1/16W	
CP219			RK75GA1J473J	CHIP-COM 47K	J	1/16W	
CP220-222			RK75GB1J101J	CHIP-COM 100	J	1/16W	
CP223			RK75GA1J101J	CHIP-COM 100	J	1/16W	
CP224,225			RK75GB1J101J	CHIP-COM 100	J	1/16W	
CP226			RK75GA1J102J	CHIP-COM 1.0K	J	1/16W	
CP228			RK75GB1J473J	CHIP-COM 47K	J	1/16W	
CP230			RK75GA1J473J	CHIP-COM 47K	J	1/16W	
CP231-233			RK75GB1J101J	CHIP-COM 100	J	1/16W	
CP351			RK75GB1J101J	CHIP-COM 100	J	1/16W	
CP731,732			RK75GB1J103J	CHIP-COM 10K	J	1/16W	
CP802			RK75GB1J473J	CHIP-COM 47K	J	1/16W	
R1			RK73GB1J103J	CHIP R 10K	J	1/16W	
R2			RK73GB1J223J	CHIP R 22K	J	1/16W	
R3			RK73GB1J100J	CHIP R 10	J	1/16W	
R4			RK73GB1J101J	CHIP R 100	J	1/16W	
R5			RK73GB1J222J	CHIP R 2.2K	J	1/16W	
R6			RK73GB1J823J	CHIP R 82K	J	1/16W	
R7			RK73GB1J331J	CHIP R 330	J	1/16W	
R8			RK73GB1J224J	CHIP R 220K	J	1/16W	
R10			RK73GB1J392J	CHIP R 3.9K	J	1/16W	
R11			RK73GB1J100J	CHIP R 10	J	1/16W	
R12			RK73GB1J101J	CHIP R 100	J	1/16W	
R13			RK73GB1J822J	CHIP R 8.2K	J	1/16W	
R14			RK73GB1J153J	CHIP R 15K	J	1/16W	
R15			RK73GB1J470J	CHIP R 47	J	1/16W	
R16			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R17			RK73GB1J391J	CHIP R 390	J	1/16W	
R18			RK73GB1J100J	CHIP R 10	J	1/16W	
R19			RK73GB1J181J	CHIP R 180	J	1/16W	
R20			RK73GB1J100J	CHIP R 10	J	1/16W	
R21			RK73GB1J331J	CHIP R 330	J	1/16W	
R22			RK73GB1J224J	CHIP R 220K	J	1/16W	
R23			RK73GB1J823J	CHIP R 82K	J	1/16W	
R24			RK73GB1J822J	CHIP R 8.2K	J	1/16W	
R25			RK73GB1J153J	CHIP R 15K	J	1/16W	
R26			RK73GB1J470J	CHIP R 47	J	1/16W	
R27,28			RK73GB1J331J	CHIP R 330	J	1/16W	
R29			RK73GB1J392J	CHIP R 3.9K	J	1/16W	
R30,31			RK73GB1J470J	CHIP R 47	J	1/16W	
R32			RK73GB1J103J	CHIP R 10K	J	1/16W	
R33			RK73GB1J180J	CHIP R 18	J	1/16W	
R34			RK73GB1J470J	CHIP R 47	J	1/16W	
R35			RK73GB1J180J	CHIP R 18	J	1/16W	
R36			RK73GB1J560J	CHIP R 56	J	1/16W	
R37			RK73GB1J180J	CHIP R 18	J	1/16W	
R38			RK73GB1J103J	CHIP R 10K	J	1/16W	
R39			RK73GB1J331J	CHIP R 330	J	1/16W	
R40			RK73GB1J153J	CHIP R 15K	J	1/16W	
R41			RK73GB1J682J	CHIP R 6.8K	J	1/16W	
R42			RK73GB1J104J	CHIP R 100K	J	1/16W	
R43			RK73GB1J331J	CHIP R 330	J	1/16W	
R44			RK73GB1J100J	CHIP R 10	J	1/16W	
R45			R92-1252-05	CHIP R 0 OHM	J	1/16W	

Ref. No.	Address	New parts	Parts No.	Description			Destination
R46			RK73GB1J470J	CHIP R 47	J	1/16W	
R47			RK73GB1J271J	CHIP R 270	J	1/16W	
R48,49			RK73GB1J104J	CHIP R 100K	J	1/16W	
R51			RK73GB1J470J	CHIP R 47	J	1/16W	
R52			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R53			RK73GB1J101J	CHIP R 100	J	1/16W	
R54			RK73GB1J391J	CHIP R 390	J	1/16W	
R55			RK73GB1J153J	CHIP R 15K	J	1/16W	
R56			RK73GB1J682J	CHIP R 6.8K	J	1/16W	
R57			RK73GB1J331J	CHIP R 330	J	1/16W	
R58,59			RK73GB1J470J	CHIP R 47	J	1/16W	
R60			RK73GB1J271J	CHIP R 270	J	1/16W	
R61			RK73GB1J470J	CHIP R 47	J	1/16W	
R63			RK73GB1J271J	CHIP R 270	J	1/16W	
R64			RK73GB1J391J	CHIP R 390	J	1/16W	
R65			RK73GB1J180J	CHIP R 18	J	1/16W	
R66			RK73GB1J271J	CHIP R 270	J	1/16W	
R67			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R68			RK73GB1J472J	CHIP R 4.7K	J	1/16W	
R69,70			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R71			RK73GB1J122J	CHIP R 1.2K	J	1/16W	
R72			RK73GB1J471J	CHIP R 470	J	1/16W	
R73			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R74			RK73GB1J471J	CHIP R 470	J	1/16W	
R75			RK73GB1J153J	CHIP R 15K	J	1/16W	
R76			RK73GB1J682J	CHIP R 6.8K	J	1/16W	
R77			RK73GB1J470J	CHIP R 47	J	1/16W	
R78			RK73GB1J101J	CHIP R 100	J	1/16W	
R79			RK73GB1J820J	CHIP R 82	J	1/16W	
R80			RK73GB1J103J	CHIP R 10K	J	1/16W	
R81			RK73GB1J271J	CHIP R 270	J	1/16W	
R82			RK73GB1J180J	CHIP R 18	J	1/16W	
R83			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R84			RK73GB1J153J	CHIP R 15K	J	1/16W	
R85			RK73GB1J682J	CHIP R 6.8K	J	1/16W	
R86			RK73GB1J271J	CHIP R 270	J	1/16W	
R87			RK73GB1J472J	CHIP R 4.7K	J	1/16W	
R88			RK73GB1J470J	CHIP R 47	J	1/16W	
R89			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R90			R92-1252-05	CHIP R 0 OHM	J	1/16W	
R91			RK73GB1J271J	CHIP R 270	J	1/16W	
R92			RK73GB1J180J	CHIP R 18	J	1/16W	
R93			RK73GB1J271J	CHIP R 270	J	1/16W	
R94			RK73GB1J103J	CHIP R 10K	J	1/16W	
R95			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R96			R92-1252-05	CHIP R 0 OHM	J	1/16W	
R97-102			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R103,104			R92-1061-05	JUMPER REST		0 OHM	
R105			RK73GB1J103J	CHIP R 10K	J	1/16W	
R106			RK73GB1J102J	CHIP R 1.0K	J	1/16W	
R107			RK73GB1J103J	CHIP R 10K	J	1/16W	
R108			RK73GB1J560J	CHIP R 56	J	1/16W	
R109			RK73GB1J104J	CHIP R 100K	J	1/16W	
R110			RK73GB1J560J	CHIP R 56	J	1/16W	
R131			RK73GB1J221J	CHIP R 220	J	1/16W	
R132			RK73GB1J472J	CHIP R 4.7K	J	1/16W	
R133			RK73GB1J2R2J	CHIP R 2.2	J	1/16W	
R134			RK73GB1J223J	CHIP R 22K	J	1/16W	
R135			RK73GB1J101J	CHIP R 100	J	1/16W	
R136			RK73GB1J123J	CHIP R 12K	J	1/16W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
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PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description				Destination
R137			RK73GB1J563J	CHIP R	56K	J	1/16W	
R138			RK73GB1J103J	CHIP R	10K	J	1/16W	
R139			RK73GB1J101J	CHIP R	100	J	1/16W	
R140,141			RK73GB1J471J	CHIP R	470	J	1/16W	
R142			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R143			RK73GB1J104J	CHIP R	100K	J	1/16W	
R144			RK73GB1J272J	CHIP R	2.7K	J	1/16W	
R145			RK73GB1J101J	CHIP R	100	J	1/16W	
R146,147			RK73GB1J103J	CHIP R	10K	J	1/16W	
R148			RK73GB1J223J	CHIP R	22K	J	1/16W	
R149			RK73GB1J474J	CHIP R	470K	J	1/16W	
R151,152			RK73GB1J153J	CHIP R	15K	J	1/16W	
R153			RK73FB2A4R7J	CHIP R	4.7	J	1/10W	
R154,155			RK73GB1J331J	CHIP R	330	J	1/16W	
R201,202			RK73GB1J473J	CHIP R	47K	J	1/16W	
R203			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R206			RK73GB1J473J	CHIP R	47K	J	1/16W	
R209			RK73GB1J153J	CHIP R	15K	J	1/16W	
R210			RK73GB1J104J	CHIP R	100K	J	1/16W	
R211			RK73GB1J103J	CHIP R	10K	J	1/16W	
R212			RK73GB1J473J	CHIP R	47K	J	1/16W	
R215			RK73GB1J101J	CHIP R	100	J	1/16W	
R217,218			RK73GB1J102J	CHIP R	1.0K	J	1/16W	EH,ES
R220			RK73GB1J473J	CHIP R	47K	J	1/16W	
R221			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R223			RK73GB1J102J	CHIP R	1.0K	J	1/16W	EH,ES
R224,225			RK73GB1J473J	CHIP R	47K	J	1/16W	
R227			RK73GB1J101J	CHIP R	100	J	1/16W	
R228			RK73GB1J473J	CHIP R	47K	J	1/16W	
R231			RK73GB1J473J	CHIP R	47K	J	1/16W	
R234,235			RK73GB1J473J	CHIP R	47K	J	1/16W	
R236			RK73GB1J153J	CHIP R	15K	J	1/16W	
R237			RK73GB1J103J	CHIP R	10K	J	1/16W	
R239			RK73GB1J102J	CHIP R	1.0K	J	1/16W	KS,ES
R240			RK73GB1J473J	CHIP R	47K	J	1/16W	
R242			RK73GB1J183J	CHIP R	18K	J	1/16W	
R246			R92-0699-05	CHIP R	10	J	1/2W	
R247			RK73GB1J822J	CHIP R	8.2K	J	1/16W	
R248			RK73GB1J562J	CHIP R	5.6K	J	1/16W	
R251			RK73GB1J223J	CHIP R	22K	J	1/16W	
R252			RK73GB1J103J	CHIP R	10K	J	1/16W	
R253			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R254			RK73GB1J103J	CHIP R	10K	J	1/16W	
R255			RK73GB1J223J	CHIP R	22K	J	1/16W	
R256			RK73GB1J473J	CHIP R	47K	J	1/16W	
R258			RK73GB1J822J	CHIP R	8.2K	J	1/16W	
R259			RK73GB1J562J	CHIP R	5.6K	J	1/16W	
R260			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R261			RK73GB1J183J	CHIP R	18K	J	1/16W	
R262			RK73GB1J223J	CHIP R	22K	J	1/16W	
R264-267			RK73GB1J223J	CHIP R	22K	J	1/16W	
R269-272			RK73GB1J103J	CHIP R	10K	J	1/16W	
R273			RK73GB1J223J	CHIP R	22K	J	1/16W	
R274			RK73GB1J101J	CHIP R	100	J	1/16W	
R275-277			RK73GB1J223J	CHIP R	22K	J	1/16W	
R278,279			RK73GB1J101J	CHIP R	100	J	1/16W	
R280			RK73GB1J223J	CHIP R	22K	J	1/16W	
R281,282			RK73GB1J101J	CHIP R	100	J	1/16W	
R283,284			RK73GB1J104J	CHIP R	100K	J	1/16W	
R285			RK73GB1J101J	CHIP R	100	J	1/16W	

Ref. No.	Address	New parts	Parts No.	Description				Destination
R286			RK73FB2A102J	CHIP R	1.0K	J	1/10W	
R287			RK73GB1J101J	CHIP R	100	J	1/16W	
R289			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R290,291			RK73GB1J103J	CHIP R	10K	J	1/16W	
R292,293			RK73GB1J222J	CHIP R	2.2K	J	1/16W	
R294			RK73GB1J223J	CHIP R	22K	J	1/16W	
R295-297			RK73GB1J103J	CHIP R	10K	J	1/16W	
R298			RK73GB1J334J	CHIP R	330K	J	1/16W	
R300			RK73GB1J334J	CHIP R	330K	J	1/16W	
R301,302			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R303			RK73GB1J223J	CHIP R	22K	J	1/16W	
R305			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R306			RK73GB1J682J	CHIP R	6.8K	J	1/16W	
R307			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R308			RK73GB1J101J	CHIP R	100	J	1/16W	
R309			RK73GB1J223J	CHIP R	22K	J	1/16W	
R310			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R311			RK73GB1J332J	CHIP R	3.3K	J	1/16W	
R312			RK73GB1J474J	CHIP R	470K	J	1/16W	
R313			RK73GB1J473J	CHIP R	47K	J	1/16W	
R314-316			RK73GB1J103J	CHIP R	10K	J	1/16W	
R317			RK73GB1J563J	CHIP R	56K	J	1/16W	
R318-320			RK73GB1J101J	CHIP R	100	J	1/16W	
R321			R92-1061-05	JUMPER REST			0 OHM	
R322			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R323			RK73GB1J473J	CHIP R	47K	J	1/16W	
R324			RK73GB1J474J	CHIP R	470K	J	1/16W	
R325-327			RK73GB1J473J	CHIP R	47K	J	1/16W	
R328-331			RK73GB1J103J	CHIP R	10K	J	1/16W	
R332,333			RK73GB1J101J	CHIP R	100	J	1/16W	
R334,335			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R336			RK73GB1J101J	CHIP R	100	J	1/16W	
R337			RK73GB1J104J	CHIP R	100K	J	1/16W	
R338			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R339-344			RK73GB1J101J	CHIP R	100	J	1/16W	
R351			RK73GJ1J103D	CHIP R	10K	D	1/16W	KH,EH
R352			RK73GJ1J393D	CHIP R	39K	D	1/16W	KH,EH
R353			RK73GJ1J103D	CHIP R	10K	D	1/16W	
R354			RK73GJ1J393D	CHIP R	39K	D	1/16W	
R355-362			RK73GB1J101J	CHIP R	100	J	1/16W	
R364-366			RK73GB1J470J	CHIP R	47	J	1/16W	
R371,372			RK73GB1J473J	CHIP R	47K	J	1/16W	
R373			RK73GJ1J392D	CHIP R	3.9K	D	1/16W	KH,EH
R374			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R375,376			RK73GB1J101J	CHIP R	100	J	1/16W	
R451,452			RK73GB1J101J	CHIP R	100	J	1/16W	
R453,454			RK73GB1J221J	CHIP R	220	J	1/16W	
R455,456			RK73GB1J391J	CHIP R	390	J	1/16W	
R457-459			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R460			RK73GB1J101J	CHIP R	100	J	1/16W	
R461			RK73GB1J470J	CHIP R	47	J	1/16W	
R462			RK73GB1J153J	CHIP R	15K	J	1/16W	
R463			RK73GB1J682J	CHIP R	6.8K	J	1/16W	
R464			RK73GB1J221J	CHIP R	220	J	1/16W	
R465			RK73GB1J101J	CHIP R	100	J	1/16W	
R466			RK73GB1J391J	CHIP R	390	J	1/16W	
R468			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R469-471			R92-0670-05	CHIP R	0 OHM			
R501			RK73GB1J101J	CHIP R	100	J	1/16W	
R502			RK73GB1J104J	CHIP R	100K	J	1/16W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
R503,504			RK73GB1J101J	CHIP R 100 J 1/16W	
R505			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R506			RK73GB1J221J	CHIP R 220 J 1/16W	
R507			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R508			RK73GB1J223J	CHIP R 22K J 1/16W	
R509			RK73GB1J103J	CHIP R 10K J 1/16W	
R510			RK73GB1J101J	CHIP R 100 J 1/16W	
R511			RK73GB1J473J	CHIP R 47K J 1/16W	
R512			RK73GB1J683J	CHIP R 68K J 1/16W	
R513			RK73GB1J103J	CHIP R 10K J 1/16W	
R514			RK73GB1J223J	CHIP R 22K J 1/16W	
R515			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R516			RK73GB1J103J	CHIP R 10K J 1/16W	
R517			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R518			RK73GB1J223J	CHIP R 22K J 1/16W	
R519			RK73GB1J333J	CHIP R 33K J 1/16W	
R520			RK73GB1J221J	CHIP R 220 J 1/16W	
R521			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R522			RK73GB1J563J	CHIP R 56K J 1/16W	
R523			RK73GB1J101J	CHIP R 100 J 1/16W	
R524			RK73GB1J681J	CHIP R 680 J 1/16W	
R525			RK73GB1J103J	CHIP R 10K J 1/16W	
R526			RK73GB1J154J	CHIP R 150K J 1/16W	
R527			RK73GB1J101J	CHIP R 100 J 1/16W	
R528			RK73GB1J471J	CHIP R 470 J 1/16W	
R551			RK73GB1J223J	CHIP R 22K J 1/16W	
R552			R92-1252-05	CHIP R 0 OHM J 1/16W	
R554			RK73GB1J334J	CHIP R 330K J 1/16W	
R556			R92-1252-05	CHIP R 0 OHM J 1/16W	
R557			RK73GB1J473J	CHIP R 47K J 1/16W	
R558			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R559			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R560			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R562,563			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R564			RK73GB1J104J	CHIP R 100K J 1/16W	
R565			RK73GB1J393J	CHIP R 39K J 1/16W	
R566			RK73GB1J101J	CHIP R 100 J 1/16W	
R567			RK73GB1J331J	CHIP R 330 J 1/16W	
R568			RK73GB1J103J	CHIP R 10K J 1/16W	
R569			RK73GB1J470J	CHIP R 47 J 1/16W	
R570			RK73GB1J104J	CHIP R 100K J 1/16W	
R571			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R572			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R573			RK73GB1J101J	CHIP R 100 J 1/16W	
R574			RK73GB1J104J	CHIP R 100K J 1/16W	
R575			RK73GB1J393J	CHIP R 39K J 1/16W	
R576			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R577			RK73GB1J331J	CHIP R 330 J 1/16W	
R578			RK73GB1J104J	CHIP R 100K J 1/16W	
R579			RK73GB1J103J	CHIP R 10K J 1/16W	
R580			RK73GB1J470J	CHIP R 47 J 1/16W	
R583			RK73GB1J101J	CHIP R 100 J 1/16W	
R584			RK73GB1J474J	CHIP R 470K J 1/16W	
R586			RK73GB1J470J	CHIP R 47 J 1/16W	
R587			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R588			RK73GB1J471J	CHIP R 470 J 1/16W	
R589			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R590			RK73GB1J104J	CHIP R 100K J 1/16W	
R591			RK73GB1J274J	CHIP R 270K J 1/16W	
R592			RK73GB1J331J	CHIP R 330 J 1/16W	

Ref. No.	Address	New parts	Parts No.	Description	Destination
R593			R92-1252-05	CHIP R 0 OHM J 1/16W	
R594			RK73GB1J470J	CHIP R 47 J 1/16W	
R595,596			RK73GB1J474J	CHIP R 470K J 1/16W	
R597			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R598			RK73GB1J331J	CHIP R 330 J 1/16W	
R599			RK73GB1J101J	CHIP R 100 J 1/16W	
R600,601			RK73GB1J471J	CHIP R 470 J 1/16W	
R602			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R603			RK73GB1J681J	CHIP R 680 J 1/16W	
R604			RK73GB1J221J	CHIP R 220 J 1/16W	
R605			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R606			RK73GB1J331J	CHIP R 330 J 1/16W	
R607			RK73GB1J821J	CHIP R 820 J 1/16W	
R608			RK73GB1J103J	CHIP R 10K J 1/16W	
R609			RK73GB1J473J	CHIP R 47K J 1/16W	
R610			RK73GB1J104J	CHIP R 100K J 1/16W	
R611			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R612			RK73GB1J104J	CHIP R 100K J 1/16W	
R622			RK73GB1J101J	CHIP R 100 J 1/16W	
R624			RK73GB1J471J	CHIP R 470 J 1/16W	
R625			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R626			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R627			RK73GB1J224J	CHIP R 220K J 1/16W	
R628			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R629			RK73GB1J334J	CHIP R 330K J 1/16W	
R631			RK73GB1J561J	CHIP R 560 J 1/16W	
R632			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R633			RK73GB1J331J	CHIP R 330 J 1/16W	
R634,635			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R636			RK73GB1J273J	CHIP R 27K J 1/16W	
R637			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R638			RK73GB1J273J	CHIP R 27K J 1/16W	
R640			R92-1252-05	CHIP R 0 OHM J 1/16W	
R641			RK73GB1J331J	CHIP R 330 J 1/16W	
R642			RK73GB1J471J	CHIP R 470 J 1/16W	
R643			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R644			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R645			RK73GB1J681J	CHIP R 680 J 1/16W	
R646			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R647			RK73GB1J473J	CHIP R 47K J 1/16W	
R648			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R649			RK73GB1J473J	CHIP R 47K J 1/16W	
R650,651			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R652			RK73GB1J103J	CHIP R 10K J 1/16W	
R653			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R654			RK73GB1J103J	CHIP R 10K J 1/16W	
R655			RK73GB1J223J	CHIP R 22K J 1/16W	
R656			RK73GB1J821J	CHIP R 820 J 1/16W	
R657			RK73GB1J122J	CHIP R 1.2K J 1/16W	
R658			RK73GB1J471J	CHIP R 470 J 1/16W	
R681			RK73GB1J123J	CHIP R 12K J 1/16W	
R682			R92-1252-05	CHIP R 0 OHM J 1/16W	
R683			RK73GB1J474J	CHIP R 470K J 1/16W	
R685			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R686			RK73GB1J274J	CHIP R 270K J 1/16W	
R687			R92-1252-05	CHIP R 0 OHM J 1/16W	
R688			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R689			RK73GB1J333J	CHIP R 33K J 1/16W	
R690			RK73GB1J103J	CHIP R 10K J 1/16W	
R691			RK73GB1J102J	CHIP R 1.0K J 1/16W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description				Destination
R692			RK73GB1J153J	CHIP R	15K	J	1/16W	
R693-697			RK73GB1J473J	CHIP R	47K	J	1/16W	
R698			RK73GB1J103J	CHIP R	10K	J	1/16W	
R699			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R700			RK73GB1J822J	CHIP R	8.2K	J	1/16W	
R701			RK73GB1J330J	CHIP R	33	J	1/16W	
R702			RK73GB1J103J	CHIP R	10K	J	1/16W	
R703			RK73GB1J331J	CHIP R	330	J	1/16W	
R704			RK73GB1J104J	CHIP R	100K	J	1/16W	
R705			RK73GB1J473J	CHIP R	47K	J	1/16W	
R706			RK73GB1J104J	CHIP R	100K	J	1/16W	
R707			RK73GB1J123J	CHIP R	12K	J	1/16W	
R708			RK73GB1J683J	CHIP R	68K	J	1/16W	
R709,710			RK73GB1J473J	CHIP R	47K	J	1/16W	
R711			RK73GB1J103J	CHIP R	10K	J	1/16W	
R712			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R713			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R714			RK73GB1J473J	CHIP R	47K	J	1/16W	
R715			RK73GB1J223J	CHIP R	22K	J	1/16W	
R731			RK73GB1J101J	CHIP R	100	J	1/16W	
R732			RK73GB1J474J	CHIP R	470K	J	1/16W	
R733			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R734			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R735			RK73GB1J103J	CHIP R	10K	J	1/16W	
R736			RK73GB1J223J	CHIP R	22K	J	1/16W	
R737			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R738			RK73GB1J473J	CHIP R	47K	J	1/16W	
R739			RK73GB1J103J	CHIP R	10K	J	1/16W	
R740			RK73GB1J104J	CHIP R	100K	J	1/16W	
R741			RK73GB1J393J	CHIP R	39K	J	1/16W	KH,EH
R741			RK73GB1J683J	CHIP R	68K	J	1/16W	KS,ES
R742			RK73GB1J104J	CHIP R	100K	J	1/16W	
R743			RK73GB1J273J	CHIP R	27K	J	1/16W	
R744			RK73GB1J222J	CHIP R	2.2K	J	1/16W	
R745,746			RK73GB1J101J	CHIP R	100	J	1/16W	
R747,748			RK73GB1J104J	CHIP R	100K	J	1/16W	
R749			RK73GB1J564J	CHIP R	560K	J	1/16W	
R750			RK73GB1J104J	CHIP R	100K	J	1/16W	
R751			RK73GB1J473J	CHIP R	47K	J	1/16W	
R752			RK73GB1J104J	CHIP R	100K	J	1/16W	
R754			RK73GB1J151J	CHIP R	150	J	1/16W	
R756			RK73GB1J103J	CHIP R	10K	J	1/16W	
R757			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R759			RK73GB1J221J	CHIP R	220	J	1/16W	
R760			RK73GB1J104J	CHIP R	100K	J	1/16W	
R762			RK73FB2A4R7J	CHIP R	4.7	J	1/10W	
R763			RK73GB1J101J	CHIP R	100	J	1/16W	
R764			RK73GB1J473J	CHIP R	47K	J	1/16W	
R765			RK73GB1J223J	CHIP R	22K	J	1/16W	
R766,767			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R768			RK73FB2A4R7J	CHIP R	4.7	J	1/10W	
R769			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R770			RK73GB1J473J	CHIP R	47K	J	1/16W	
R772			RK73GB1J224J	CHIP R	220K	J	1/16W	KH,EH
R772			RK73GB1J394J	CHIP R	390K	J	1/16W	KS,ES
R774			RK73GB1J182J	CHIP R	1.8K	J	1/16W	
R775			RK73GB1J183J	CHIP R	18K	J	1/16W	
R801			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R802			RK73GB1J101J	CHIP R	100	J	1/16W	
R803			RK73GB1J333J	CHIP R	33K	J	1/16W	

Ref. No.	Address	New parts	Parts No.	Description				Destination
R804			RK73GB1J103J	CHIP R	10K	J	1/16W	KH,EH
R804			RK73GB1J153J	CHIP R	15K	J	1/16W	KS,ES
R805			RK73GB1J473J	CHIP R	47K	J	1/16W	
R806			RK73GB1J103J	CHIP R	10K	J	1/16W	
R807			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R808-811			RK73GB1J333J	CHIP R	33K	J	1/16W	KH,EH
R810,811			RK73GB1J333J	CHIP R	33K	J	1/16W	KS,ES
R812			RK73GB1J104J	CHIP R	100K	J	1/16W	
R813			RK73GB1J334J	CHIP R	330K	J	1/16W	
R814			RK73GB1J333J	CHIP R	33K	J	1/16W	
R815			RK73GB1J222J	CHIP R	2.2K	J	1/16W	
R816			RK73GB1J103J	CHIP R	10K	J	1/16W	KH,EH
R816			RK73GB1J153J	CHIP R	15K	J	1/16W	KS,ES
R817			RK73GB1J224J	CHIP R	220K	J	1/16W	
R818			RK73GB1J394J	CHIP R	390K	J	1/16W	
R819			RK73GB1J334J	CHIP R	330K	J	1/16W	
R820			RK73GB1J105J	CHIP R	1.0M	J	1/16W	KS,ES
R820-822			RK73GB1J105J	CHIP R	1.0M	J	1/16W	KH,EH
R822			RK73GB1J105J	CHIP R	1.0M	J	1/16W	KS,ES
R823			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R824			RK73GB1J471J	CHIP R	470	J	1/16W	
R826,827			RK73GB1J471J	CHIP R	470	J	1/16W	KH,EH
R827			RK73GB1J471J	CHIP R	470	J	1/16W	KS,ES
R828			RK73GB1J330J	CHIP R	33	J	1/16W	
R830			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R832,833			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R834			RK73GB1J103J	CHIP R	10K	J	1/16W	
R835			RK73GB1J224J	CHIP R	220K	J	1/16W	
R837			RK73GB1J273J	CHIP R	27K	J	1/16W	
R838			RK73GB1J822J	CHIP R	8.2K	J	1/16W	
R839			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R840			RK73GB1J103J	CHIP R	10K	J	1/16W	
R841			RK73GB1J104J	CHIP R	100K	J	1/16W	
R845			RK73GB1J104J	CHIP R	100K	J	1/16W	
R846			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R847			RK73GB1J103J	CHIP R	10K	J	1/16W	
R848			RK73GB1J563J	CHIP R	56K	J	1/16W	
R850			RK73GB1J560J	CHIP R	56	J	1/16W	
R851			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R852			RK73GB1J104J	CHIP R	100K	J	1/16W	
R853			RK73GB1J332J	CHIP R	3.3K	J	1/16W	
R854			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R856			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R857			RK73GB1J222J	CHIP R	2.2K	J	1/16W	
R858			RK73GB1J561J	CHIP R	560	J	1/16W	
R859			RK73GB1J101J	CHIP R	100	J	1/16W	
R901			RK73GB1J103J	CHIP R	10K	J	1/16W	
R902,903			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R904			RK73GB1J223J	CHIP R	22K	J	1/16W	
R905			RK73GB1J471J	CHIP R	470	J	1/16W	
R906			RK73GB1J104J	CHIP R	100K	J	1/16W	
R907			RK73GB1J393J	CHIP R	39K	J	1/16W	
R908			RK73GB1J101J	CHIP R	100	J	1/16W	
R909			RK73GB1J330J	CHIP R	33	J	1/16W	
R911			RK73GB1J471J	CHIP R	470	J	1/16W	
R912			RK73GB1J470J	CHIP R	47	J	1/16W	
R913			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R914			RK73GB1J331J	CHIP R	330	J	1/16W	
R918			R92-1252-05	CHIP R	0 OHM	J	1/16W	
R919			RK73GB1J102J	CHIP R	1.0K	J	1/16W	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TX-RX UNIT (X57-663X-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
R920			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R921			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R922			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R923			RK73GB1J103J	CHIP R 10K J 1/16W	
R924			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R925			RK73GB1J822J	CHIP R 8.2K J 1/16W	
R926			RK73GB1J101J	CHIP R 100 J 1/16W	
R927			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R931,932			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R933,934			RK73GB1J392J	CHIP R 3.9K J 1/16W	
R935			RK73GB1J101J	CHIP R 100 J 1/16W	
R936			RK73GB1J331J	CHIP R 330 J 1/16W	
R937-939			RK73GB1J101J	CHIP R 100 J 1/16W	
R940			RK73GB1J391J	CHIP R 390 J 1/16W	
R941,942			R92-1252-05	CHIP R 0 OHM J 1/16W	
R943,944			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R945			RK73GB1J392J	CHIP R 3.9K J 1/16W	
R946			RK73GB1J101J	CHIP R 100 J 1/16W	
R947			RK73GB1J391J	CHIP R 390 J 1/16W	
R948,949			R92-1252-05	CHIP R 0 OHM J 1/16W	
R950			RK73GB1J681J	CHIP R 680 J 1/16W	
R951-954			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R955-958			RK73GB1J101J	CHIP R 100 J 1/16W	
R971			R92-1252-05	CHIP R 0 OHM J 1/16W	
R972			RK73GB1J471J	CHIP R 470 J 1/16W	
R973			RK73GB1J823J	CHIP R 82K J 1/16W	
R975,976			RK73GB1J101J	CHIP R 100 J 1/16W	
R977			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R978			R92-1252-05	CHIP R 0 OHM J 1/16W	
R979			RK73GB1J101J	CHIP R 100 J 1/16W	
R980			RK73GB1J103J	CHIP R 10K J 1/16W	
R981			RK73GB1J471J	CHIP R 470 J 1/16W	
R982			RK73GB1J332J	CHIP R 3.3K J 1/16W	
VR1,2			R12-7484-05	TRIMMING POT. (4.7K/8)	KH,EH
VR2			R12-7484-05	TRIMMING POT. (4.7K/8)	KS,ES
VR621,622			R12-7484-05	TRIMMING POT. (4.7K/8)	
K131			S51-1420-05	RELAY	
K731			S51-1428-05	RELAY	
S201			S62-0412-05	SLIDE SWITCH	
D1			KV1470	VARIABLE CAPACITANCE DIODE	
D2,3			HSC277	DIODE	
D4			MA2S111	DIODE	
D131-135			DA221	DIODE	
D136			MA2S111	DIODE	
D137		✻	015AZ3.3-X	ZENER DIODE	
D138			MA2S111	DIODE	
D139		✻	015AZ5.1-Y	ZENER DIODE	
D202			MINISMDC050-02	VARISTOR	
D203,204			015AZ6.8	ZENER DIODE	
D205			MA2S111	DIODE	
D206		✻	015AZ10-Y	ZENER DIODE	
D207		✻	015AZ3.3-X	ZENER DIODE	
D208		✻	KDS121E	DIODE	
D210			MA2S111	DIODE	
D211		✻	015AZ3.3-X	ZENER DIODE	
D212		✻	KDZ18EV	ZENER DIODE	
D213			RLS245	DIODE	
D351,352		✻	KDZ18EV	ZENER DIODE	KH,EH
D352		✻	KDZ18EV	ZENER DIODE	KS,ES

Ref. No.	Address	New parts	Parts No.	Description	Destination
D353,354			DA221	DIODE	
D355,356			1SS388	DIODE	
D357			MINISMDC050-02	VARISTOR	
D358			RLS245	DIODE	
D359			1SS388	DIODE	
D360			MINISMDC050-02	VARISTOR	
D451,452			KV1470	VARIABLE CAPACITANCE DIODE	
D453,454			HSC277	DIODE	
D455			KV1470	VARIABLE CAPACITANCE DIODE	
D456			HSC277	DIODE	
D501			RB706F-40	DIODE	
D551			RN731V	DIODE	
D552			HSM88AS	DIODE	
D555			HSM88AS	DIODE	
D557,558		✻	KDS121E	DIODE	
D559			1SS388	DIODE	
D622,623			MA2S111	DIODE	
D624,625			1SS388	DIODE	
D681-683			MA2S111	DIODE	
D733,734			1SS388	DIODE	
D735		✻	KDS121E	DIODE	
D736			MA2S111	DIODE	
D801		✻	015AZ5.1-Y	ZENER DIODE	
D802			MA2S111	DIODE	
D804			015AZ6.8	ZENER DIODE	
D805			1SS388	DIODE	KS,ES
D805,806			MA2S111	DIODE	KH,EH
D806			MA2S111	DIODE	KS,ES
D807,808		✻	KDS120E	DIODE	
D809		✻	015AZ3.3-X	ZENER DIODE	
D810		✻	015AZ5.1-Y	ZENER DIODE	
D811			MA2S111	DIODE	
D812,813			1SS388	DIODE	
D816-819			MA2S111	DIODE	
D901-904			RN731V	DIODE	
D905			1SS388	DIODE	
D906			RN731V	DIODE	
D931			RN731V	DIODE	
D932-936		✻	1SV312	DIODE	
D937			HSC277	DIODE	
D938			HVC131	DIODE	
D939-941			HSC277	DIODE	
D944,945			1SS388	DIODE	
IC1,2			AD9835BRU	MOS IC	
IC3			LMX2306TMX	MOS IC	
IC201			TC74HC4052AFT	MOS IC	
IC202			AT25640N10SI27	ROM IC	
IC203			ADM202EARU	MOS IC	
IC204		✻	HD64F2338VFC25	MCU	
IC205		✻	HD74HCT541T	MOS IC	
IC207		✻	HD74LV2G34AUS	MOS IC	
IC208			TC7WT125FU	MOS IC	
IC209		✻	HD74LV2G34AUS	MOS IC	
IC210,211			PST9130NR	MOS IC	
IC212			M62364FP	MOS IC	
IC213		✻	XC6203P332P	MOS IC	
IC214			NJM2100V	MOS IC	
IC215		✻	XC6203P332P	MOS IC	
IC216			XC62FP1802P	MOS IC	
IC217			AK4550VT	MOS IC	

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**

PARTS LIST

TX-RX UNIT (X57-663X-XX)
SUB UNIT (X58-4900-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination
IC218			NJM2100V	MOS IC	
IC219			BU4066BCFV	MOS IC	
IC220			320VC5402PGE	MPU	
IC221			NJM2100V	MOS IC	
IC222		✻	HD74LV541AT	MOS IC	
IC223			TC7S04FU	MOS IC	
IC224			NJM2100V	MOS IC	
IC225			TC7WT125FU	MOS IC	
IC226		✻	HD74LV1GT125A	MOS IC	
IC227		✻	HD74LV2G34AUS	MOS IC	
IC551			TA31136FN	MOS IC	
IC552			TC7W66FK	MOS IC	
IC553			TA4101F	IC (IC)	
IC554			TC75S51FE	MOS IC	
IC621		✻	NJM1496V	BI-POLAR IC	
IC681		✻	M62353AGP	MOS IC	
IC682			BU4066BCFV	MOS IC	
IC683			NJM2100V	MOS IC	
IC684			BU4S66	MOS IC	
IC685			TC7S66FU	MOS IC	
IC695			XC6204B502MR	MOS IC	
IC731			BU2099FV	MOS IC	
IC732			NJM2904V	MOS IC	
IC733			BU4066BCFV	MOS IC	
IC734			LA4446	BI-POLAR IC	
IC801			NJM2904V	MOS IC	
IC802			NJM2902V	MOS IC	
Q1-8			2SC4617(R)	TRANSISTOR	
Q9			UMX2N	TRANSISTOR	
Q10-12			2SC4617(R)	TRANSISTOR	
Q13			RN47A5	TRANSISTOR	
Q14,15			2SC4649(N,P)	TRANSISTOR	
Q16		✻	KRC418E	DIGITAL TRANSISTOR	
Q17			2SC4617(R)	TRANSISTOR	
Q18			UMX2N	TRANSISTOR	
Q19			2SC4617(R)	TRANSISTOR	
Q131			KRC402E	DIGITAL TRANSISTOR	
Q132			2SB1188(Q,R)	TRANSISTOR	
Q133			UMX2N	TRANSISTOR	
Q134,135			RN1704	TRANSISTOR	
Q136			2SK1824	FET	
Q137,138			KRC402E	DIGITAL TRANSISTOR	
Q201			2SC4617(R)	TRANSISTOR	
Q202			2SB1188(Q,R)	TRANSISTOR	
Q203			RN47A5	TRANSISTOR	
Q204		✻	KRC401E	DIGITAL TRANSISTOR	
Q205			KRC402E	DIGITAL TRANSISTOR	
Q207		✻	HN7G01FU	TRANSISTOR	
Q451,452			2SK508NV(K52)	FET	
Q453,454		✻	KRC418E	DIGITAL TRANSISTOR	
Q455			2SC4649(N,P)	TRANSISTOR	
Q456			2SK508NV(K52)	FET	
Q457		✻	KRC418E	DIGITAL TRANSISTOR	
Q501			2SC3356	TRANSISTOR	
Q502			UMX2N	TRANSISTOR	
Q503			2SK1824	FET	
Q504-506			2SC4617(Q)	TRANSISTOR	
Q507			KRA302E	DIGITAL TRANSISTOR	
Q508			2SC4617(R)	TRANSISTOR	
Q551		✻	3SK317	FET	

Ref. No.	Address	New parts	Parts No.	Description	Destination
Q552			2SC4617(R)	TRANSISTOR	
Q553			KRC402E	DIGITAL TRANSISTOR	
Q554		✻	3SK317	FET	
Q556-558			2SC4617(R)	TRANSISTOR	
Q559			KRC402E	DIGITAL TRANSISTOR	
Q560			RN1704	TRANSISTOR	
Q561			KRC402E	DIGITAL TRANSISTOR	
Q562		✻	KRC404E	DIGITAL TRANSISTOR	
Q563			KRC402E	DIGITAL TRANSISTOR	
Q621-623			2SC4617(R)	TRANSISTOR	
Q624			2SA1774(R)	TRANSISTOR	
Q625			UMX2N	TRANSISTOR	
Q681			RN47A5	TRANSISTOR	
Q682		✻	HN7G01FU	TRANSISTOR	
Q683			2SC4617(R)	TRANSISTOR	
Q684		✻	HN7G01FU	TRANSISTOR	
Q685,686			KRC402E	DIGITAL TRANSISTOR	
Q731			RN1704	TRANSISTOR	
Q732,733		✻	KRA555U	DIGITAL TRANSISTOR	
Q734			2SK1824	FET	
Q735			2SD1624(S)	TRANSISTOR	
Q737			RN47A5	TRANSISTOR	
Q803			RN1701	TRANSISTOR	
Q805		✻	KRC404E	DIGITAL TRANSISTOR	
Q806			2SC4617(R)	TRANSISTOR	
Q807		✻	KRA318E	DIGITAL TRANSISTOR	
Q901		✻	3SK317	FET	
Q902,903			KRC402E	DIGITAL TRANSISTOR	
Q971			2SC3356	TRANSISTOR	
TH551			157-502-65001	THERMISTOR	
TH552			157-503-65001	THERMISTOR	
TH621,622			157-471-65001	THERMISTOR	
TH901			157-101-65001	THERMISTOR	
TH902			157-302-65801	THERMISTOR	
TH971			157-101-65001	THERMISTOR	
TH972			157-302-65801	THERMISTOR	

SUB UNIT (X58-4900-XX) -00 : KH,EH -01 : KS,ES

C1			CK73FB1H102K	CHIP C	1000PF	K		
C2,3			CK73FB1E104K	CHIP C	0.10UF	K		
C4-7			CC73FCH1H220J	CHIP C	22PF	J		KS,ES
C4,5			CC73FCH1H220J	CHIP C	22PF	J		KH,EH
C6,7			CC73FCH1H331J	CHIP C	330PF	J		KH,EH
C8,9			CC73FCH1H331J	CHIP C	330PF	J		KS,ES
C10			CK73FB1E104K	CHIP C	0.10UF	K		
-		✻	F01-1029-04	RADIATION PLATE				
R3,4			RK73FB2A332J	CHIP R	3.3K	J	1/10W	
R5,6		✻	R92-3569-05	CHIP R	330	J	1/4W	
R7,8			RK73FB2A1R0J	CHIP R	1.0	J	1/10W	
R9,10			RK73FB2A270J	CHIP R	27	J	1/10W	KS,ES
R9,10			RK73FB2A560J	CHIP R	56	J	1/10W	KH,EH
D1,2			1SS388	DIODE				
Q1,2			2SK3075-H	FET				

KH : TS-480HX (K) **KS : TS-480SAT (K)**
EH : TS-480HX (E) **ES : TS-480SAT (E)**