

FT-203R

TECHNICAL SUPPLEMENT



This booklet contains supplemental technical information related to the FT-203R for use with the FT-203R Operating Manual. Service or repairs to the FT-203R transceiver should be performed by qualified technicians only.

YAESU MUSEN CO., LTD.
C.P.O. BOX 1500
TOKYO, JAPAN

CHIP COMPONENT INFORMATION

Transistors

Location	Nomenclature	Mark
Q2010,2013,2015, 2020,2021,2022, 2025	2SA1162GR	S G
Q1002,1003,1004, 1013,1014,2004, 2005,2006	2SC2620B	Q B
Q1006,1007,1010, 1012,2011,2014, 2018,2019,2023, 2024,2026,2027	2SC2712GR	L G
Q1015,2003	2SC2759	U22
Q1001	2SC3356	R22

Example:
Nomen. Code

S G

hFE Rank

COLLECTOR

BASE

EMITTER

MARKED SURFACE

SOURCE

GATE

DRAIN

MARKED SURFACE

2SK242(T3)

2SK210Y(YY)

2SK2080(JO)

2SK184(B3)

1SS226(C3)

FETs

Q2017	2SK2080	J O
Q2001	2SK210Y	Y Y
Q2002	2SK242	T3

Example:
Nomen. Code

J O

Idss Rank

GATE

SOURCE

DRAIN

MARKED SURFACE

2SK2080(JO)

2SK210Y(YY)

2SK242(T3)

2SK184(B3)

1SS226(C3)

1SS182(B1)

1SS183(B2)

1SS184(B3)

1SS224(C1)

1SS225(C2)

1SS226(C3)

1SS182(30V)

1SS183(50V)

1SS184(80V)

1SS224(30V)

1SS225(50V)

1SS226(80V)

V_{GS} Rating (80V)

MARKED SURFACE

2SK2080(JO)

2SK210Y(YY)

2SK242(T3)

2SK184(B3)

1SS226(C3)

1SS182(B1)

1SS183(B2)

1SS184(B3)

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1SS226(C3)

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1SS224(30V)

1SS225(50V)

1SS226(80V)

V_{GS} Rating (80V)

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1SS183(50V)

1SS184(80V)

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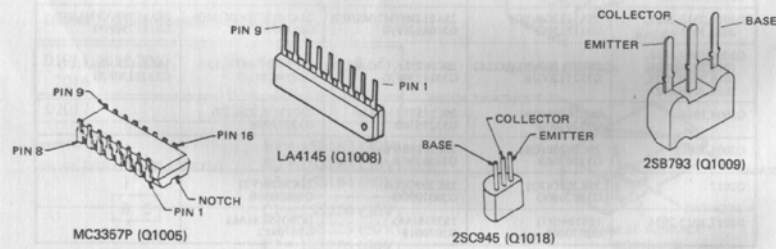
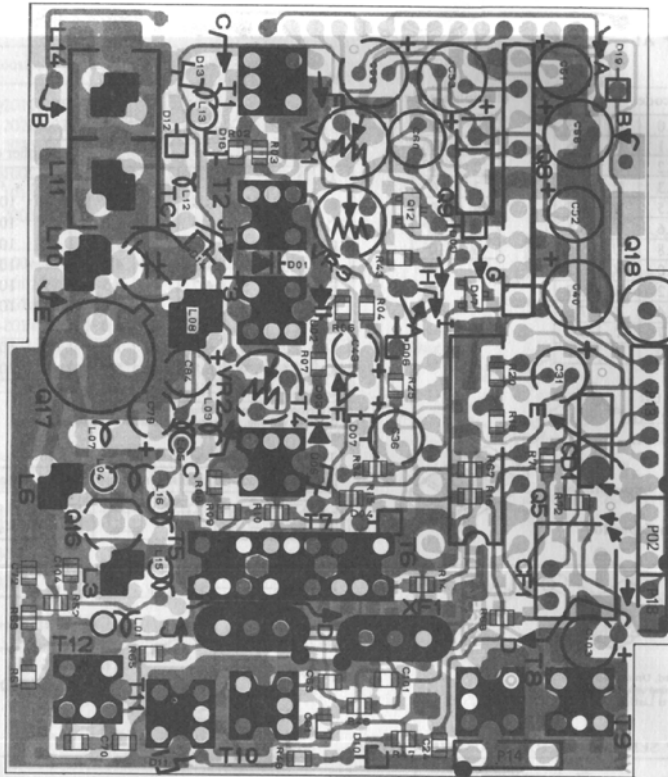
MARKED SURFACE

2SK2080(JO)

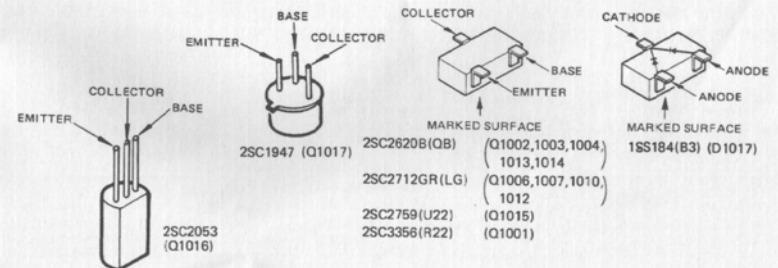
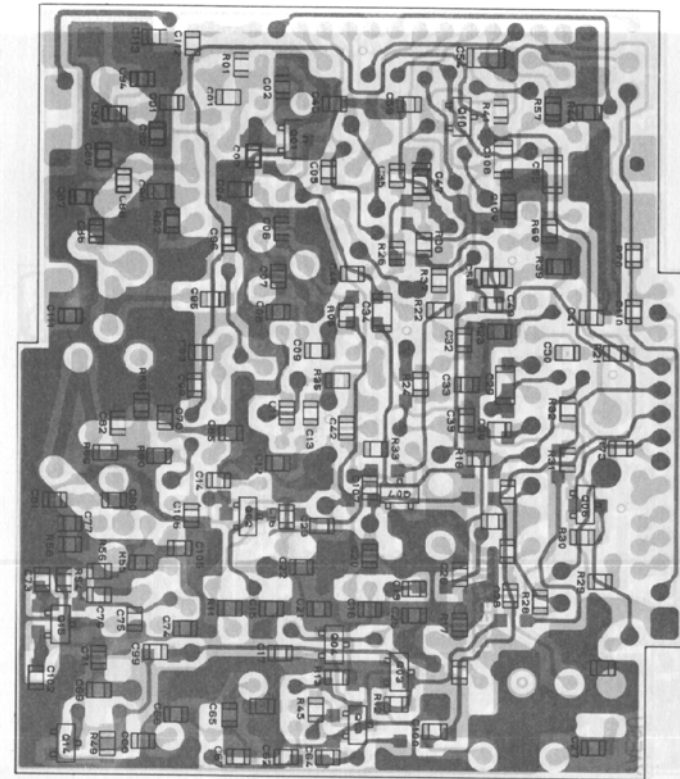
2SK210Y(YY)

2SK242(T3)

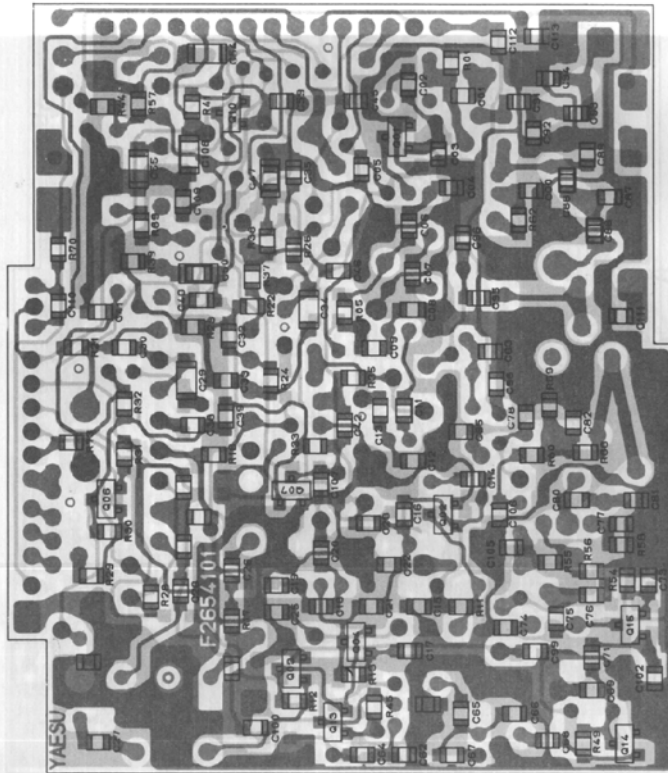
MAIN UNIT PARTS LAYOUT
(obverse view of 'mixed component' side)



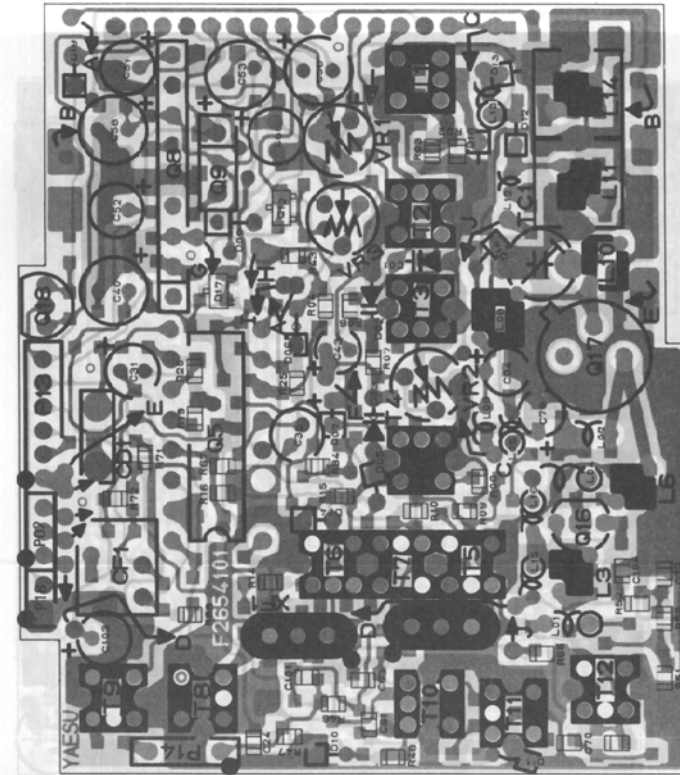
MAIN UNIT PARTS LAYOUT
(reverse view of 'chip-only' side)



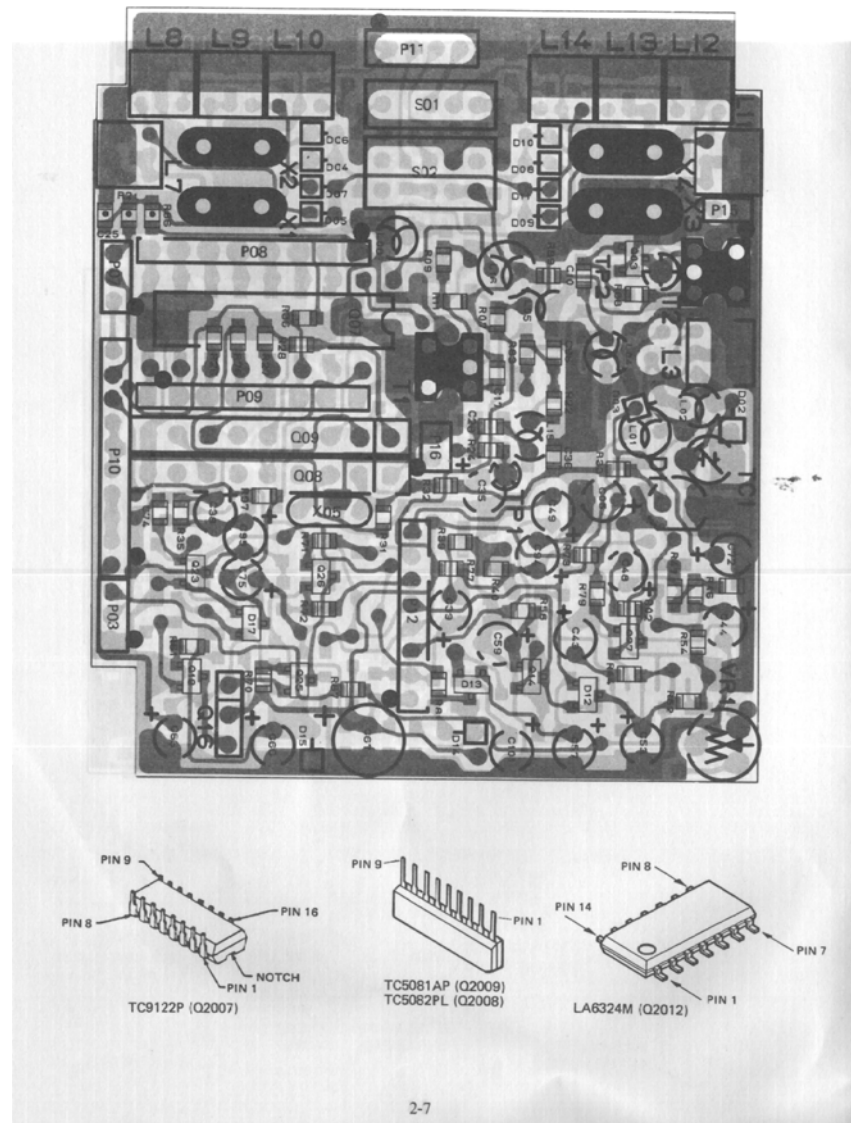
MAIN UNIT PARTS LAYOUT
(obverse view 'chip-only' side)



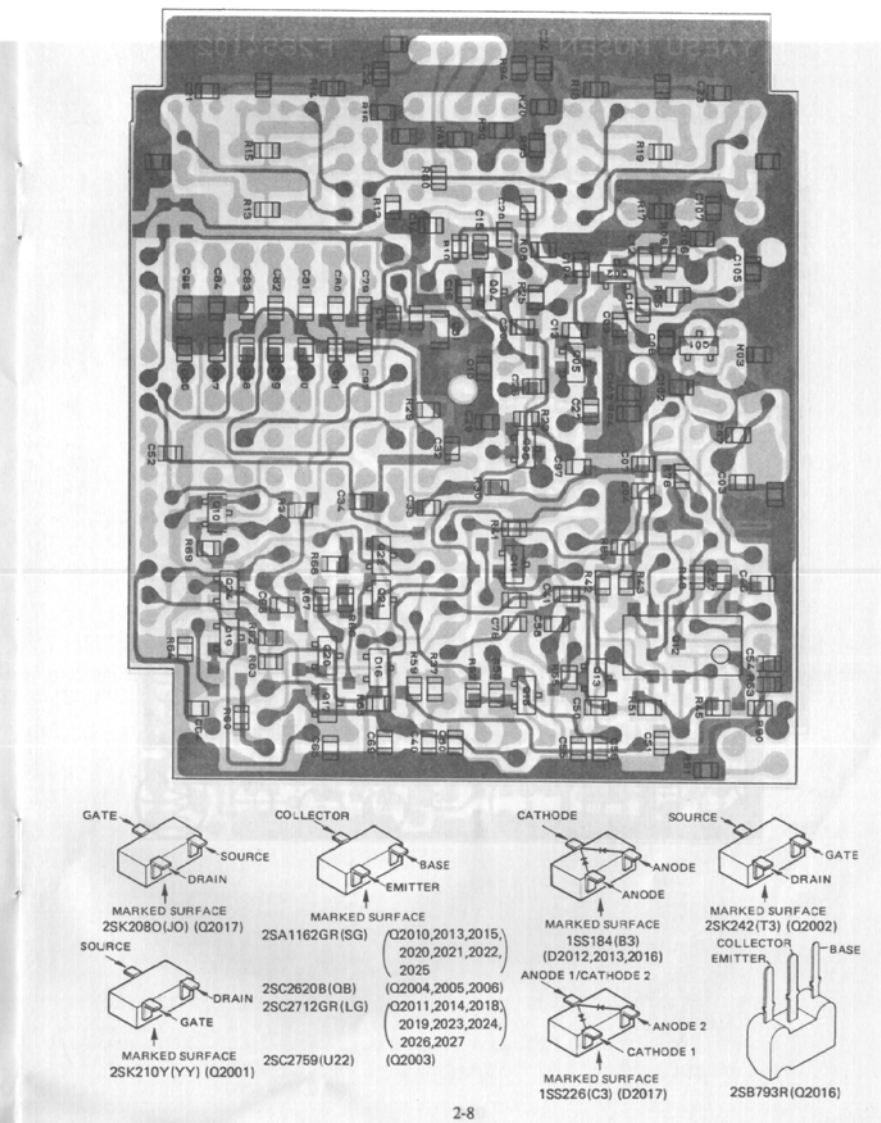
MAIN UNIT PARTS LAYOUT
(reverse view of 'mixed component' side)



PLL UNIT PARTS LAYOUT
(obverse view of 'mixed component' side)

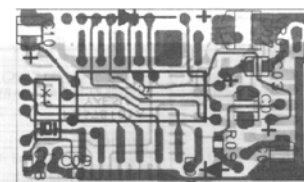


PLL UNIT PARTS LAYOUT
(reverse view of 'chip-only' side)

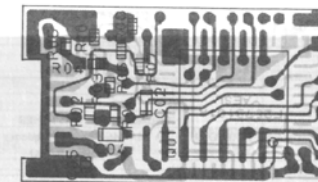


The figure contains four schematic diagrams of a main board and its sub-units:

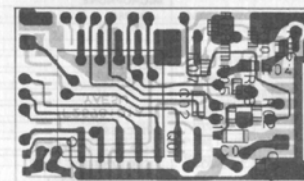
- Top view:** Shows the main board layout with components labeled M1, VR1, VR2, S3, S4, S5, S4001, S4002, SW A UNIT, and SW B UNIT. It also includes a 12V01 voltage regulator and a 5V01 voltage regulator.
- Bottom view:** Shows the reverse side of the main board with components labeled M1, VR1, S3, S4, S5, S4001, S4002, SW A UNIT, and SW B UNIT. It also includes a 12V01 voltage regulator and a 5V01 voltage regulator.
- SWITCH B UNIT:** A detailed view of the Switch B unit, showing a 12V01 voltage regulator, a 5V01 voltage regulator, and a 12V01 voltage regulator.
- SWITCH A UNIT:** A detailed view of the Switch A unit, showing a 12V01 voltage regulator, a 5V01 voltage regulator, and a 12V01 voltage regulator.



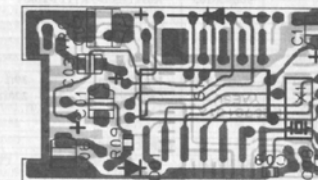
Obverse view of "mixed component" side



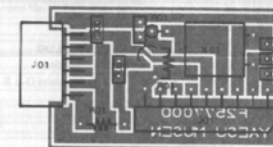
Obverse view of "chip-only" side



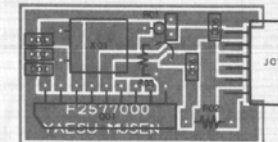
Reverse view of "chip-only" side



Reverse view of "mixed component" side



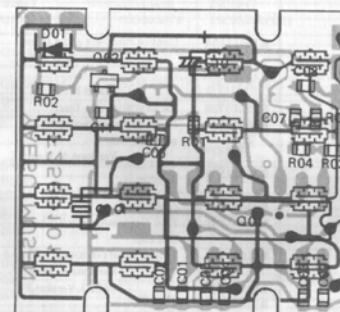
Obverse view



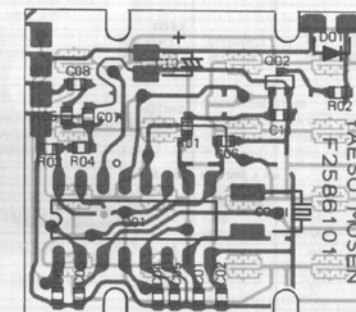
Reverse view

FTE-2

FTT-3



Front view



Rear view

PARTS LIST

MAIN CHASSIS			SWITCH	
Symbol No.	Part No.	Description	S4001	N4090088
*** PANEL BOARD ASSY ***				
	F2658000	Printed Circuit Board		
		PCB with components		
		w/SW (A), (B) UNIT	J4001	P1090369
			J4002	P1090370
S3,4,5	N7090029	THUMBWHEEL SWITCHES		
		A7MA-146-P2 (Frequency select)	C1	K12171102
			C3,4	K22170805
		POTENTIOMETER		
VR1	J60800104	K09111002-SR1112-5KB 5kΩB (SQL)		
VR2	J60800105	K0911100B-SR1111-20KA 20kΩA (VOL)	MIC1	M3290005
		RESISTORS		
R1	J20336390	Metallic film 2W 39Ω	SP1	M4090063
R2	J24205221	Chip RMC1/10T 221J 220Ω		
		CAPACITORS		
C2	K22170217	Chip 50WV 18pF CH (C2012CH1H180JFA)	S1	—
			S2,6,7	N4090040
			S8	—
		INDUCTOR		
L1	L0020334		J1	P1090353
		METER		
M1	M0290044	MH-42F		
		LAMP		
PL1	Q1000054	#7656 6V 35mA	P1,2,3 (for FTS-7)	T9204880
			P1,2,3 (for FTE-2)	T9204881A
			P8	T9204875C
			P9	T9204876A
			P10-13	T9204882A
			P14-16	T9204899
			P17	T9204900
			P18	T9204959
		*** SWITCH UNIT A ***		
	F2656000	Printed Circuit Board		
	C026560A	PCB with Components		
		LEDS		
D3001	G2090278	LN38GCP	R3501110A	Control Panel w/r and g filters
D3002	G2090279	LN28RCP		Models A, D and E
			R3501120A	Model F
			R3501070B	Battery Mounting Track
S3001	N4090088	SPJ622N (HI/LOW)	R3501140A	Front Cover w/trim band, w/o spkr, mic
				Versions A, D and E
			R3501150A	Version F
		*** SWITCH UNIT B ***		
	F2657000	Printed Circuit Board		
	C026570A	PCB with Components	R010820A	(Trim band)
		Models A, D and E	R3800510D	Rear Cover w/o switch label, belt clip
		Model F	R8101970A	Switch Label (+600kHz RPT and VOX)
				Versions A, D and E
			R8102040A	(VOX) Version F
			R3107390	Spacer

R3501040	Left Side Cover (PTT) or (PTT and BURST)	XF1001	H1102081	CRYSTAL FILTER SET
R3503640A	Right Side Cover (LAMP)			10L15B (2 pos; MATCHED PAIR)
R3503670A	PTT Button Versions A and F (long)			
R3503660A	" " Versions D and E (short)	CF1001	H3900030	CERAMIC FILTER
				LF-B15
R3503650A	BURST Button			
R3503680A	LAMP Button			
R3503420	UNLOCK Latch Button			CERAMIC DISCRIMINATOR
R0107210A	Spring	CD1001	H7900180	CDB455C7
R0101840A	Belt Clip			
S6000061	Hand Strap			
Q9000284	Insulator			
				RESISTORS
R3101740	Knob 11TS (VOL and SQL)	R1067,1068,1071-1073	J24205000	Chip RMC 1/10T 000J 0Ω
R3101730A	Push Button (LOW, and +5kHz or CALL)	R1031,1058,1066	J24205100	" " " 100J 10Ω
		R1059	J24205330	" " " 330J 33Ω
R3108840	Switch Extender (VOX, or RPT and VOX)	R1054	J24205470	" " " 470J 47Ω
		R1046,1065	J24205101	" " " 101J 100Ω
R6101860	Strap Mounting Screw	R1069	J24205151	" " " 151J 150Ω
R0101870	Washer	R1062	J24205181	" " " 181J 180Ω
R6101850	Strap Mounting Dummy Screw	R1001,1056	J24205221	" " " 221J 220Ω
R0801590B	Frame F	R1051	J24205331	" " " 331J 330Ω
R0503280B	Frame R	R1060	J24205391	" " " 391J 390Ω
R0503260A	Panel Frame	R1017	J24205471	" " " 471J 470Ω
R7102620	Fiber Board	R1029	J24205561	" " " 561J 560Ω
		R1044,1052,1053,1055	J24205681	" " " 681J 680Ω
		R1004,1010	J24205821	" " " 821J 820Ω
		R1014,1019,1025	J24205102	" " " 102J 1kΩ
		R1021,1023	J24205152	" " " 152J 1.5kΩ
		R1028,1035	J24205222	" " " 222J 2.2kΩ
		R1034	J24205332	" " " 332J 3.3kΩ
		R1002,1008,1011,1026,1032	J24205472	" " " 472J 4.7kΩ
		R1070	J24205562	" " " 562J 5.6kΩ
		R1003,1037	J24205103	" " " 103J 10kΩ
		R1038	J24205153	" " " 153J 15kΩ
		R1009	J24205183	" " " 183J 18kΩ
		R1022,1041	J24205223	" " " 223J 22kΩ
		R1013,1039,1045	J24205333	" " " 333J 33kΩ
		R1020,1043	J24205473	" " " 473J 47kΩ
Q1009	G3207930R	2SB793R	R1012	J24205823
Q1016	G3320530	2SC2053		" " " 823J 82kΩ
Q1017	G3319470	2SC1947		" " " 104J 100kΩ
Q1002-1004,1013,1014	G3326207B	2SC2620B(QB)	R1024	J24205274
			R1030,1033	J24205564
Q1006,1007,1010,1012	G3327127G	2SC2712GR(LG)		
Q1001,1015	G3331207	2SC3120(HB)		
Q1018	G3309451P	2SC945AP		
				POTENTIOMETERS
			VR1002	J51762103
			VR1001	J51762104
			VR1003	J51762224
				H0521A113A-10KB 10kΩB
				H0521A119A-100KB 100kΩB
				H0521A121A-220KB 220kΩB
				CAPACITORS
D1006	G2015550	SI 1S1555		
D1017	G2070009	" 1S8184(B3)		
D1012,1013,1018	G2090277	" 1S8205		
D1007,1014	G2090244	Schottky 1S8106	C1011,1021,1065	K22170202
D1004,1005,1010,1011	G2090109	Varactor 1SV69		Chip 50WV 1pF CH (C2012CH1H010CFA)
			C1016,1095	K22170203
D1001-1003	G2090248	" IT32		" " 2pF "
D1009	G2090227	Zener HZ9B2L		(C2012CH1H020CFA)
D1019	G2090310	Schottky 11DQ04	C1025,1088,1093	K22170204
				" " 3pF "
				(C2012CH1H030CFA)

C1027,1096	K22170206	Chip 50WV 5pF (C2012CH1H050CFA)	CH	C1040	K70080006	Tantalum 6.3WV 47µF (489D476X0006D1)
C1004	K22170306	" 5pF (C2012U1H050CFA)	UJ	C1060	K40179001	" 50WV 1µF (ECE-A1HK010)
C1022	K22170307	" 6pF (C2012U1H060DFA)	"	C1036,1052	K40149011	Electrolytic 25WV 4.7µF (ECE-A1EK4R7)
C1008,1012,1062, 1966	K22170308	" 7pF (C2012U1H070DFA)	"	C1043,1051	K40129012	" 16WV 10µF (ECE-A1CK100)
C1069	K22170208	" 7pF (C2012CH1H070DFA)	CH	C1053,1056,1058	K40109015	" 10WV 100µF (ECE-A1AK101)
C1071	K22170209	" 8pF (C2012CH1H080DFA)	"			
C1018	K22170309	" 8pF (C2012U1H080DFA)	UJ			TRIMMER CAPACITOR
C1003,1080,1102, 1114	K22170211	" 10pF (C2012CH1H100DFA)	CH	TC1001	K91000100	ECR-GA020E30 20pF
C1064	K22170313	" 12pF (C2012U1H120DFA)	UJ			TRANSFORMERS
C1067	K22170315	" 15pF (C2012U1H150JFA)	"	T1001	L0021416	
C1075	K22170215	" 15pF (C2012CH1H150JFA)	CH	T1002	L0021427	
C1002,1089	K22170217	" 18pF (C2012CH1H180JFA)	"	T1003,1004,1006, 1007,1010-1012	L0021418	
C1001,1087	K22170219	" 22pF (C2012CH1H220JFA)	"	T1005,1008,1009	L0021419	
C1006,1009,1013	K22170319	" 22pF (C2012U1H220JFA)	UJ			INDUCTORS
C1020,1023	K22170321	" 27pF (C2012U1H270JFA)	"	L1001,1004	L1020686	
C1007	K22170221	" 27pF (C2012CH1H270JFA)	CH	L1002,1005,1009, 1015,1016	L1020677	
C1092	K22170223	" 33pF (C2012CH1H330JFA)	"	L1003	L0020748	
C1081,1094	K22170225	" 39pF (C2012CH1H390JFA)	"	L1006	L0020423	
C1068,1076, 1107	K22170227	" 47pF (C2012CH1H470JFA)	"	L1008	L0020987A	
C1086	K22170233	" 82pF (C2012CH1H820JFA)	"	L1010	L0020424	
C1030,1038,1039	K22170239	" 150pF (C2012CH1H151JFA)	"	L1011,1014	L0020342	
C1005,1014,1017, 1019,1024,1032, 1033,1035,1045, 1049,1057,1059, 1061,1063,1070, 1072,1073,1074, 1077,1078, 1083,1085,1090, 1091,1098,1099, 1101,1104,1105, 1106,1110,1112, 1113	K22170805	" 0.001µF B (C2012B1H102MFA)	B	L1012	L1190105	FL3H-IR0M
C1046,1109	K22170817	" 0.01µF B (C2012B1H103MFA)	B	L1013	L1020687	
C1026,1028	K22171004	" 0.01µF F (C2012F1H103ZFA)	F		L9190039	Coil Case
C1015,1041,1042	K22171008	" 0.047µF F (C2012F1H473ZFA)	F		R0106330	HEAT SINK
C1029,1034,1047, 1050,1054,1055, 1108	K22141904	" 25WV 0.1µF D (C3216D1E104MFA)	D			FERRITE BEADS
C1031	K70167224	Tantalum 35WV 0.22µF (CS15E1VR22M)			L9190044	R1 2.5x1.2-1
C1079,1084,1103	K70120002	" 16WV 10µF (489D106X0016C1)				PLL UNIT
				Symbol No.	Part No.	Description
					F2654102A	Printed Circuit Board
					C026542A	PCB with Components
					C026542C	" Models A and E
					C026542D	" Model D
					C026542H	" " F
						" Model A w/DTMF
						ICs
				Q2007	G1090247	TC9122P
				Q2008	G1090560	TC5082PL
				Q2009	G1090473	TC5081AP
				Q2012	G1090559	LA6324M
						FETS
				Q2001	G3802107Y/G (G3801921G)	2SK210Y(Y/Y/G) (2SK192AGR)

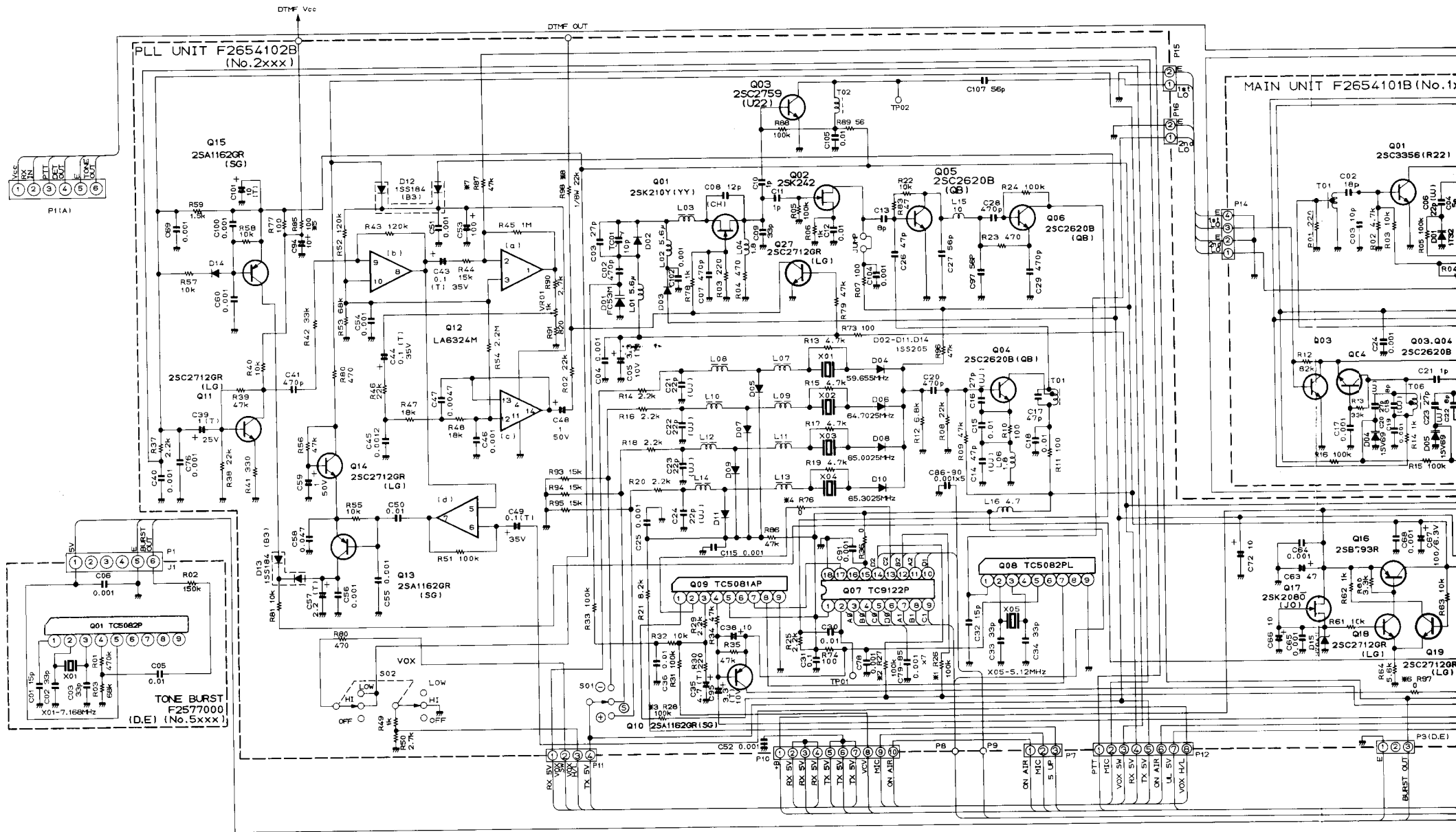
Q2017	G38020870	2SK208-Q(O)	R2061,2063,2066, 2068,2070,2071, 2081	J24205103	Chip RMC 1/10T 103J 10kΩ
Q2002	G38024270	2SK242(T3)			
			R2044,2093-2095	J24205153	" " " 153J 15kΩ
			R2047,2048	J24205183	" " " 183J 18kΩ
			R2002,2008,2038, 2046,2065	J24205223	" " " 223J 22kΩ
Q2010,2013,2015, 2020-2022,2025	G3111627G	TRANSISTORS 2SA1162GR(SG)	R2042	J24205333	" " " 333J 33kΩ
Q2016	G3207930R	2SB793R	R2009,2034,2035, 2039,2056,2079, 2086,2096	J24205473	" " " 473J 47kΩ
Q2004-2006	G3326207B	2SC2620B(QB)	R2053	J24205683	" " " 683J 68kΩ
Q2011,2014,2018, 2019,2023,2024, 2026,2027	G3327127G	2SC2712GR(LG)	R2005,2024, 2026-2028 2031,2033,2051, 2069,2088	J24205104	" " " 104J 100kΩ
Q2003	G3331207	2SC3120(QB)			
		DIODES			
D2012,2013,2016	G2070009	SI 1SS184(B3)	R2043,2052	J24205124	" " " 124J 120kΩ
D2002-2011,2014	G2090277	" 1SS205	R2045	J24205105	" " " 105J 1MΩ
D2017	G2070003	" 1SS226(C3)	R2054	J24205225	" " " 225J 2.2MΩ
D2001	G2090180	Varactor FC53M-5			
D2015	G2090176	Zener HZ6A1L			
			VR2001	J51762102	POTENTIOMETER H0521A107A-1 KB 1kΩB
		CRYSTALS			CAPACITORS
X2001*	H0102560	HC-18/T 59.655MHz Models A, D and E	C2010,2011	K22170202	Chip 50WV 1pF (C2012CH1H010CFA)
X2001	H0102564A	" 32.32625MHz	C2013	K22170209	" 8pF
X2002	H0102563	" 64.7025MHz	C2008	K22170213	" 12pF
X2003	H0102561	" 65.0025MHz Models A, D and E	C2009,2032	K22170215	" 15pF
X2003*	H0102565A	" 35.000MHz	C2021,2022,2023, 2024	K22170319	" 22pF
X2004	H0102562	" 65.3025MHz Models A, D and E	C2016	K22170321	" 27pF
X2005	H0102559A	" 5.1205MHz	C2003	K22170221	" 27pF
		RESISTORS			
R2036,2076,2097	J24205000	Chip RMC 1/10T 000J 0Ω	C2003*,2033,2034	K22170223	" 33pF
R2083	J24205470	" " " 470J 47Ω	C2017,2026	K22170227	" 47pF
R2089	J24205560	" " " 560J 56Ω	C2014	K22170327	" 47pF
R2007,2010,2011, 2073,2074,2077, 2085	J24205101	" " " 101J 100Ω			
R2003,2030	J24205221	" " " 221J 220Ω	C2027,2097*,2107	K22170229	" 56pF
R2041	J24205331	" " " 331J 330Ω			
R2004,2023,2080	J24205471	" " " 471J 470Ω	C2002,2007,2020, 2028,2029,2041	K22170801	" 470pF B
R2010*	J24205561	" " " 561J 560Ω			
R2091	J24205821	" " " 821J 820Ω	C2004,2021*, 2023*,2025, 2040,2046,2051, 2052, 2054-2056, 2060,2064,2065, 2068,2069,2074, 2076,2078,2079, 2092,2102,2104, 2115	K22170805	" 0.001µF B (C2012B1H102MFA)
R2006,2049,2062, 2078	J24205102	" " " 102J 1kΩ			
R2059,2072	J24205152	" " " 152J 1.5kΩ			
R2014,2016,2018, 2020,2025,2029, 2037	J24205222	" " " 222J 2.2kΩ			
R2050,2090	J24205272	" " " 272J 2.7kΩ			
R2060	J24205332	" " " 332J 3.3kΩ	C2045	K22170806	" 0.0012µF B (C2012B1H122MFA)
R2013,2015,2017, 2019,2067	J24205472	" " " 472J 4.7kΩ	C2047	K22170813	" 0.0047µF B (C2012B1H472MFA)
R2064	J24205562	" " " 562J 5.6kΩ	C2012,2018,2036	K22170817	" 0.01µF B (C2012B1H103MFA)
R2021	J24205682	" " " 682J 6.8kΩ			
R2022,2032,2040, 2055,2057,2058	J24205822	" " " 822J 8.2kΩ	C2015,2030,2050, 2105	K22171004	" 0.01µF F (C2012F1H103ZFA)
	J24205103	" " " 103J 10kΩ			

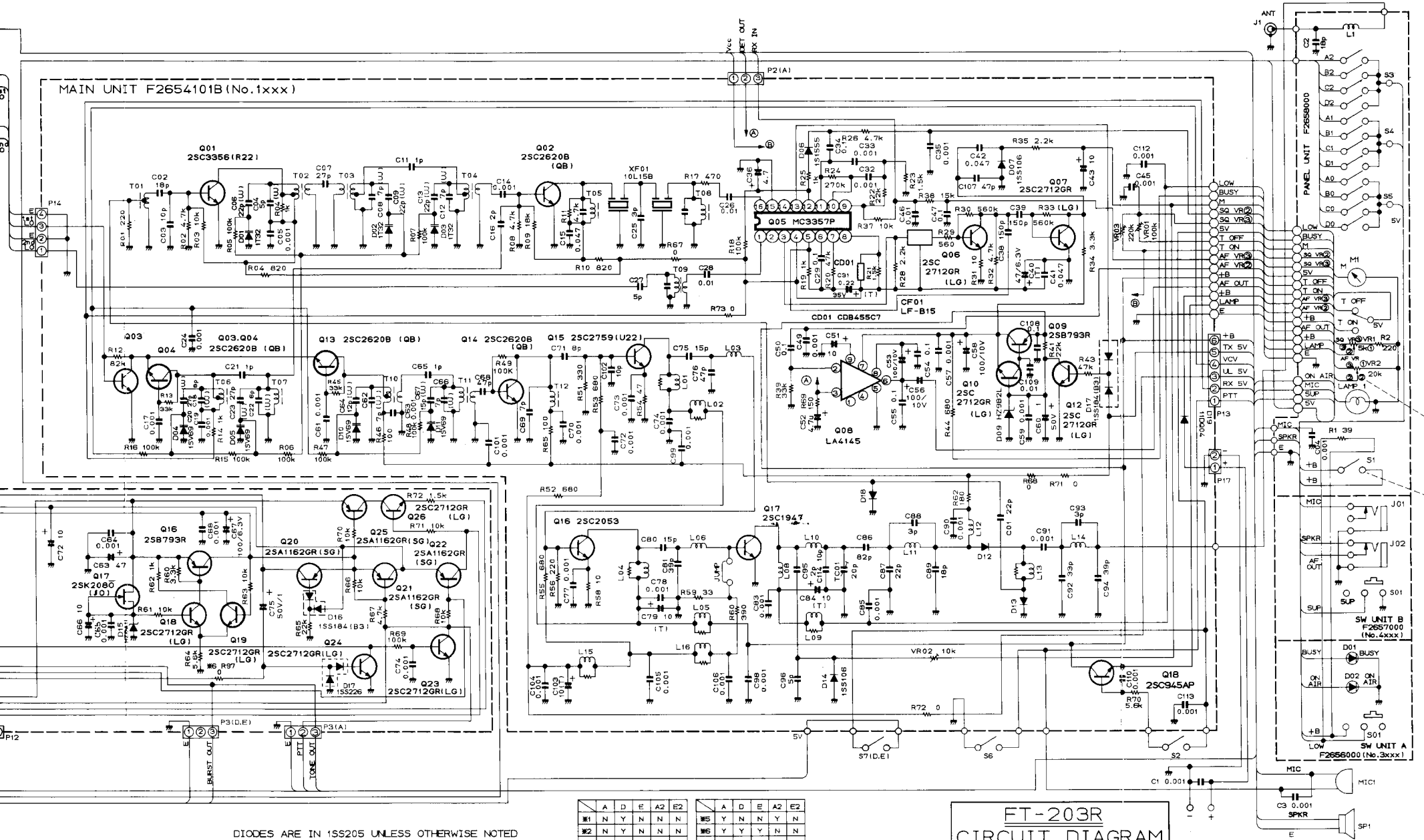
* Model F

C2058	K22171008	Chip 50WV 0.047μF F (C2012FH473ZFA)	ACCESSORIES		
C2031	K22141904	" 25WV 0.1μF D (C3216D1E104MFA)	Symbol No.	Part No.	Description
C2043,2044,2049	K70167104	Tantalum 35WV 0.1μF (CS15E1V0R1M)		Q3000037	Antenna YHA-14A
C2039,2075	K70140007	" 25WV 1μF (489D105X0025A1)			Ni-Cd Battery Pack*
C2057	K70127225	" 16WV 2.2μF (CS15E1C2R2M)		D3000315	FNB-3
				D3000316	FNB-4
C2005,2095	K70107335	" 10WV 3.3μF (CS15E1A3R3M)			Dry Battery Case*
C2035	K70120001	" 16WV 4.7μF (489D475X0016B1)		D3000317	FBA-5
C2101	K70120002	" 16WV 10μF (489D106X0016C1)			Charger for FNB-3*
C2048,2059	K40179001	Electrolytic 1μF (ECE-A1HK010)		Q9000070	NC-9A 100VAC
				Q9000071	NC-9B 117VAC
				Q9000072	NC-9C 220-234VAC
C2038,2066,2072,2094,2035*	K40129012	" 16WV 10μF (ECE-A1CK100)			
C2063	K40129028	" 47μF (ECE-A1CK470)			Charger for FNB-4*
				Q9000279	NC-18A 100VAC
C2053,2067	K40089007	" 6.3WV 100μF (ECE-A0JK101)		Q9000280	NC-18B 117VAC
				Q9000281	NC-18C 220-234VAC
		TRIMMER CAPACITOR			
TC2001	K91000101	ECR-GA010D30 10pF			Carrying Case*
				D3000325	CSC-6(B) for w/FNB-3 or FBA-5
				D3000344	CSC-7(B) for w/FNB-4
		TRANSFORMERS		D3000351	CSC-9(B) for w/FNB-3 or FBA-5 & FTT-3
T2001,2002	L0021418			D3000370	CSC-12(B) for w/FNB-4 & FTT-3
		INDUCTORS			
L2001,2002	L1190111	FL4H-5R6K 5.6μH			
L2002*	L1190013	FL4H-6R8K 6.8μH			* optional same models
L2004,2006	L1190145	FL3H-1R8M 1.8μH			
L2005	L1020680				
L2015	L1190141	FL3H-100K 10μH			
L2016	L1190110	FL3H-4R7K 4.7μH			
L2003	L0021415				
L2007,2009,2011	L0021420				
L2003*	L0021491				
		CONNECTORS			
J2001	P0090390	3022-07A			
J2002	P0090069	3022-06A			
J2001,2002(F)	P0090092	3022-08A			
			Q5001	G1090239	IC TCS082P
		SWITCHES			
S2001	N6090042	SSS313040			
S2002	N6090040	SSS323122	X5001	H0101982	CRYSTALS HC-18/T 7.168MHz (1750Hz Tone)
			X5001	H0101983	HC-18/T 7.3728MHz (1800Hz Tone)
		TERMINAL POST			
	Q5000016	TP-E			
					RESISTORS
	R0106700B	Shield case	R5003	J00215683	Carbon film 1/8W 68kΩ TJ
	R0106710	Shield cover	R5002	J01215154	" " " 150kΩ TJ
			R5001	J00215474	" " " 470kΩ VJ

* Model F

		CAPACITORS			SWITCH
C5001	K00175150	Ceramic disc 50WV 15pF SL (DD104SL150J50V)	S1001	N7090030	SGK1072
C5002,5003	K00175330	" " " 33pF " (DD104SL330J50V)			
C5006	K12171102	" " " 0.001μF E (DD104E102P50V)	J1001	P0090373	CONNECTOR 5703-06CPB
C5005	K14180103	" " " 63WV 0.01μF FZ (RD871-LFZ103Z63V)			
		SIP CONNECTOR			FTT-3 DTMF PANEL UNIT (D3000348)
J5001	P0090373	5703-06CPB	Symbol No.	Part No.	Description
				F2586100	Printed Circuit Board
			Q6001	G1090508	IC LR4087
			Q6002	G3327120G	TRANSISTOR 2SC2712GR
		FTS-7 TONE ENCODER/DECODER (D3000321)			
		Symbol No.	Part No.	Description	
		F2578101A		D6001	G2090208
					LED PR4632K
		IC			CERAMIC RESONATOR
Q1001	G1090577	MN6520	CO6001	H7900120	R3.58M
					RESISTORS
		DIODES			
D1001,1002	G2090244	Schottky Barrier 1SS106	R6002	J24205561	Chip RMC-1/10T 561J 560Ω
			R6003	J24205222	" " " 222J 2.2kΩ
			R6001	J24205103	" " " 103J 10kΩ
			R6004,6005	J24205823	" " " 823J 82kΩ
		CRYSTAL			
X1001	H0102571	MS-309 4.194304MHz			
			C6001,6002	K22170227	CAPACITORS
					Chip 50WV 47pF CH (C2012CH1H470JFA)
R1009,1010	J24205102	Chip RMC 1/10T 102J 1kΩ	C6003-6006,6008,6011	K22170805	" " " 0.001μF B
R1002	J24205222	" " " 222J 2.2kΩ			(C2012B1H102MFA)
R1006	J24205472	" " " 472J 4.7kΩ	C6007	K22170817	" " " 0.01μF B
R1003,1007,1008	J24205103	" " " 103J 10kΩ			(C2012B1H103MFA)
R1004,1005	J24205123	" " " 123J 12kΩ	C6008	K22141904	" 25WV 0.1μF D
R1001	J24205104	" " " 104J 100kΩ			(C3216D1E104MFA)
			C6010	K40129012	Electrolytic 16WV 10μF (ECE-A1CK100)
		POTENTIOMETER			
VR1001	J51750473	H0423A047-47KB 47kΩB			
			N5090020		KEYPAD SM-725
		CAPACITOR			
C1008,1009	K22170217	Chip Ceramic 50WV 18pF CH (C2012CH1H180JFA)	MIC1	M3290005	MICROPHONE EM-78C
C1005	K22171004	" " " 0.01μF F (C2012F1H103ZFA)	SP1	M4090063	SPEAKER CO35A13
C1002,1004	K22141904	" " 25WV 0.1μF D (C3216D1E104MFA)			
C1003	K72080002	Chip Tantalum 6.3WV 4.7μF (F950J475MA1)		R3502640	Panel
				R0101820	Trim band
C1001,1006	K72080003	" " " 10μF (F950J106MC1)		R7049012	Speaker net
C1007	K72060007	" " 4WV 100μF (F950G107MH1)			





	A	D	E	A2	E2
#1	N	N	N	N	N
#2	N	N	N	N	N
#3	N	N	N	N	N
#4	N	N	N	N	N
#5	N	N	N	N	N
#6	N	N	N	N	N
#7	N	N	N	N	N
#8	N	N	N	N	N

FT-203R
CIRCUIT DIAGRAM