

**TRANSCEIVER ADJUSTMENTS/TUNE-UP PROCEDURE**

There are no user accessible adjustments or tuning in this portable cellular transceiver. All necessary adjustments and tuning are performed during manufacture of the product. Any adjustments or tuning after service or repair are done as part of that process as special equipment is required to perform such adjustments.

**Parts List**

Reference Symbol	Part Number	Value
C455	2113743L05	330pF
C454	2113743L25	2200pF
C7131	2113947B05	33pF
C7124	2113947B05	33pF
C7123	2113947B05	33pF
C7122	2113947B05	33pF
C7121	2113947B05	33pF
C172	2104801Z08	1.2pF
C171	2104801Z08	1.2pF
C459	2113743N34	22pf
C456	2113743N34	22pF
C450	2113743N34	22pF
C247	2113743N34	22pF
C252	2113743N37	30pF
C251	2113743N37	30pF
C151	2113743N42	47pF
C143	2113743N40	39pF
C313	2113743N18	4.7pF
C331	0809084T38	.0033uF
C312	2113740F71	820pF
C332DNP	2113743L01	220pF
C442	2113743N16	3.9pF
C364	2113743N16	3.9pF
C314DNP	2113743N32	18pF
C701	2113743N32	18pF
C700	2113743N32	18pF
C250	2113743N32	18pF
C458	2113743N50	100pF
C453	2113743N50	100pF
C443	2113743N50	100pF
C348	2113743N50	100pF
C341	2113743N50	100pF
C170	2113743N50	100pF
C160	2113743N50	100pF
C150	2113743N50	100pF
C142	2113743N50	100pF
C315	2113740F61	270pF
C318DNP	2113743N54	150pF
C350	2113743N05	1.2pF
C346	2113743N05	1.2pF
C152	2113743N05	1.2pF
C135	2113743N05	1.2pF
C121	2113743N05	1.2pF
C5003	2113743N28	12pF
C5002	2113743N28	12pF
C4109	2113743N28	12pF
C317	2113743N28	12pF

C311	2113743N28	12pF
C213	2113743N28	12pF
C212	2113743N28	12pF
C211	2113743N28	12pF
C210	2113743N28	12pF
C4403	2113741F41	4700pF
C7003	2113743N26	10pF
C435	2113743N26	10pF
C430	2113743N26	10pF
C136	2113743N26	10pF
C127	2113743N26	10pF
C126	2113743N26	10pF
C4401DNP	2113743L15	820pF
C4404	2113743L15	820pF
C3751	2113928C04	4.7uF
C3700	2113928C04	4.7uF
C3002	2113928C04	4.7uF
C242	2113928C04	4.7uF
C7001	2113928C12	10uF
C7000	2113928C12	10uF
C4309	2113928C12	10uF
C3603	2113928C12	10uF
C3602	2113928C12	10uF
C3601	2113928C12	10uF
C3501	2113928C12	10uF
C3500	2113928C12	10uF
C3300	2113928C12	10uF
C3202	2113928C12	10uF
C3201	2113928C12	10uF
C3200	2113928C12	10uF
C3100	2113928C12	10uF
C3750	2113928P04	1.0uF
C3450	2113928P04	1.0uF
C3151	2113928P04	1.0uF
C3150	2113928P04	1.0uF
C248	2113928P04	1.0uF
C240	2113928P04	1.0uF
C204	2113928P04	1.0uF
C3701DNP	2113743L41	.01uF
C3800	2113743L41	.01uF
C3050	2113743L41	.01uF
C3010	2113743L41	.01uF
C246	2113743L41	.01uF
C245	2113743L41	.01uF
C123	2113743L41	.01uF
C4108	2113743M24	0.1uF
C408	2113743M24	0.1uF
C407	2113743M24	0.1uF
C402	2113743M24	0.1uF

C400	2113743M24	0.1uF
C300	2113743M24	0.1uF
C208	2113743M24	0.1uF
C201	2113743M24	0.1uF
C101DNP	2113743N01	0.5pF
C102	2113743N09	2pF
C406DNP	2113743N38	33pF
C7139	2113743N38	33pF
C7137	2113743N38	33pF
C7136	2113743N38	33pF
C7135	2113743N38	33pF
C7134	2113743N38	33pF
C7133	2113743N38	33pF
C7132	2113743N38	33pF
C7130	2113743N38	33pF
C7129	2113743N38	33pF
C7128	2113743N38	33pF
C7127	2113743N38	33pF
C7126	2113743N38	33pF
C7120	2113743N38	33pF
C5000	2113743N38	33pF
C4406	2113743N38	33pF
C4400	2113743N38	33pF
C4106	2113743N38	33pF
C4104	2113743N38	33pF
C4103	2113743N38	33pF
C4100	2113743N38	33pF
C4005	2113743N38	33pF
C4004	2113743N38	33pF
C4003	2113743N38	33pF
C4002	2113743N38	33pF
C4001	2113743N38	33pF
C3041	2113743N38	33pF
C3003	2113743N38	33pF
C425	2113743N38	33pF
C420	2113743N38	33pF
C405	2113743N38	33pF
C401	2113743N38	33pF
C305	2113743N38	33pF
C304	2113743N38	33pF
C303	2113743N38	33pF
C302	2113743N38	33pF
C140	2113743N38	33pF
C125	2113743N38	33pF
C124	2113743N38	33pF
C120	2113743N38	33pF
C115	2113743N38	33pF
C113	2113743N38	33pF
C109	2113743N38	33pF

C108	2113743N38	33pF
C107	2113743N38	33pF
C106	2113743N38	33pF
C105	2113743N36	27pF
C3001	2113743N30	15pF
C3000	2113743N30	15pF
C1013	2113743N30	15pF
C162	2113743N30	15pF
C161	2113743N30	15pF
C1400	2113743L17	1000pF
C451	2113743L17	1000pF
C301	2113743L17	1000pF
C209	2113743L17	1000pF
C203	2113743L17	1000pF
C141	2113743L17	1000pF
C1101	2113947H01	0.1uF
C1100	2113947H01	0.1uF
C1006	2113947H01	0.1uF
C1004	2113947H01	0.1uF
C205	2113947H01	0.1uF
C200	2113947H01	0.1uF
C7138	2113928N01	0.1uF
C5001	2113928N01	0.1uF
C4405	2113928N01	0.1uF
C4402	2113928N01	0.1uF
C4107	2113928N01	0.1uF
C3203	2113928N01	0.1uF
C3043	2113928N01	0.1uF
C3042	2113928N01	0.1uF
C3040	2113928N01	0.1uF
C2004	2113928N01	0.1uF
C2003	2113928N01	0.1uF
C2002	2113928N01	0.1uF
C1011	2113928N01	0.1uF
C1009	2113928N01	0.1uF
C1007	2113928N01	0.1uF
C1003	2113928N01	0.1uF
C1002	2113928N01	0.1uF
J4100	90919500000	CONN_J
J4300	0987837L04	CONN_J
J4500	0988252L01	CONN_J
J5000	0987636K06	CONN_J
J3500	0185923C01	CONN_J
J4400	0987817K04	CONN_J
VR4201	4809948D45	PACDN1404C
VR4405	4809788E17	EDZ68B
CR7001	4809948D42	RB751V40
CR3010	4809948D42	RB751V40
CR7000	4809653F07	MBRM120ET3

CR3800	4809653F07	MBRM120ET3
CR3500	4809653F07	MBRM120ET3
D3601	4809653F07	MBRM120ET3
D3001	4809924D18	RB520S-30
U430	5888495L01	LDC15H140J
U420	5888494L01	LDC15H200J
FL4300	4889526L04	FLTR
FL170	9109487U02	400MHz
U202	9162929A01	FLTR
FL140	9185906G13	06G13
FL130	9185906G14	06G14
FL160	9109674L16	MDF754F
FL216	4889526L03	FLTR
U7003	9188695K03	TNA06
U5000	4809606E12	EMIF11
U3001	5162852A16	LMC7211
U201	5109879E66	SC79701VHR2
U140	5109944C47	MC13748
U3000	5109879E83	GCAP3
U1000	5195015D22	15D22
U500	5109522E73	NC7WZ08K
U503	5109522E74	NC7ST08
U501	5109522E74	NC7ST08
U710	5109522E35	TC7S86FU
U2003	5185353D64	K6F1616R6M
U2000	5199491A01	28F640W18
U7000	5109731C32	MC33645
U450	5109923D50	23D50
U400	5109908K66	08K66
U170	5162852C02	52C02
U7002	5109817F58	17F58
U7004	5162852A58	NLAS44599
U120	5109572E40	UPG158TB
U110	5109572E40	UPG158TB
U100	5109572E38	AC_717
L442	2409154M06	2.7nH
L172	2409646M96	68nH
L171	2409646M96	68nH
L170	2409646M96	68nH
L173	2413926G17	68nH
L135	2409154M37	12.0nH
L121	2409154M33	5.6nH
L122	2409154M34	6.8nH
L151	2409154M38	15.0nH
L150	2409154M38	15.0nH
L160	2409154M03	1.5nH
L161	2409154M32	4.7nH
L443	2409154M05	2.2nH
L351	2409154M05	2.2nH

L361	2409154M08	3.9nH
L360	2409154M10	5.6nH
L3601	2487659M08	15uH
L3500	2589584K14	47uH
L7001	2409154M43	39.0nH
L5002	2409154M43	39.0nH
L5001	2409154M43	39.0nH
L5000	2409154M43	39.0nH
L123	2409154M43	39.0nH
L7000	2409154M96	47.0nH
L109	2409646M41	2.2nH
L100	2409154M11	6.8nH
L105	2409154M42	33.0nH
S4423	4087635K01	SWITCH
S4422	4087635K01	SWITCH
S4421	4087635K01	SWITCH
S4420DNP	PT39PTYA03	SWITCH
S4419DNP	PT39PTYA03	SWITCH
S4418DNP	PT39PTYA03	SWITCH
S4417DNP	PT39PTYA03	SWITCH
S4416DNP	PT39PTYA03	SWITCH
S4415DNP	PT39PTYA03	SWITCH
S4414DNP	PT39PTYA03	SWITCH
S4413DNP	PT39PTYA03	SWITCH
S4412DNP	PT39PTYA03	SWITCH
S4411DNP	PT39PTYA03	SWITCH
S4410DNP	PT39PTYA03	SWITCH
S4409DNP	PT39PTYA03	SWITCH
S4408DNP	PT39PTYA03	SWITCH
S4407DNP	PT39PTYA03	SWITCH
S4406DNP	PT39PTYA03	SWITCH
S4405DNP	PT39PTYA03	SWITCH
S4404DNP	PT39PTYA03	SWITCH
S4403DNP	PT39PTYA03	SWITCH
S4402DNP	PT39PTYA03	SWITCH
S4401DNP	PT39PTYA03	SWITCH
S4400DNP	PT39PTYA03	SWITCH
M7000	3986666K01	CONTACT
J100	0987378K01	SWITCH
DS4409	4809496B18	LNJ026X8B0MT
DS4407	4809496B18	LNJ026X8B0MT
DS4406	4809496B18	LNJ026X8B0MT
DS4404	4809496B18	LNJ026X8B0MT
DS4403	4809496B18	LNJ026X8B0MT
DS4402	4809496B18	LNJ026X8B0MT
DS4401	4809496B18	LNJ026X8B0MT
DS4400	4809496B18	LNJ026X8B0MT
D4410	4809118D02	LNJ115W8P0MT
U203	4809283D95	83D95

Y250	4809612J43	XTAL
U300	4809283D81	83D81
Y3000	4809995L13	CC5V
R453	0662057N10	30K
R452	0662057M95	7.5K
R4404	0662057M90	4.7K
R457	0662057M90	4.7K
R7010	0662057M30	15
R5000	0609591M05	22
R4413	0662057U49	82
R4412	0662057U49	82
R4411	0662057U49	82
R4410	0662057U49	82
R4409	0662057U49	82
R4408	0662057U49	82
R4407	0662057U49	82
R4406	0662057U49	82
R5002	0662057M78	1.5K
R170	0662057M78	1.5K
R252	0662057M84	2.7K
R204	0662057M38	33
R203	0662057M38	33
R202	0662057M38	33
R242	0662057M02	1
R213	0662057M62	330
R240	0662057M14	3.3
R200	0609591M07	33
R315	0662057M74	1K
R314	0662057M72	820
R340DNP	0662057M76	1.2K
R350	0662057M26	10
R346	0662057M26	10
R354	0662057M56	180
R312	0662057N15	47K
R361	0662057M46	68
R440	0662057M43	51
R347	0662057M43	51
R345	0662057M43	51
R342	0662057M43	51
R4403	0662057N01	12K
R4108	0662057N21	82K
R348	0662057N21	82K
R7004	0609591M13	100
R3011	0662057N13	39K
R3700	0662057M19	5.1
R7002	0662057M92	5.6K
R7001	0662057M92	5.6K
R3501	0662057M92	5.6K
R3601	0687874L02	0.1

R3500	0687874L02	0.1
R7003	0662057N09	27K
R4402	0662057N09	27K
R4105	0662057N54	2MEG
R3051	0662057N06	20K
R4405	0662057N03	15K
R4106	0662057N03	15K
R3800	0687874L01	0.24
R4400	0662057N32	240K
R4107	0662057N32	240K
R5003	0662057N23	100K
R1406	0662057N23	100K
R313	0662057N23	100K
R7005	0662057M50	100
R1500	0662057M50	100
R341	0662057M50	100
R201	0662057M50	100
R5007	0662057M98	10K
R4104	0662057M98	10K
R3050	0662057M98	10K
R3010	0662057M98	10K
R3009	0662057M98	10K
R1400	0662057M98	10K
R502	0662057M98	10K
R212	0662057M98	10K
R1002	0609591M37	10K
R705	0609591M37	10K
R3052	0662057N34	300K
R1003	0662057N34	300K
R454	0662057N34	300K
R5008DNP	0662057M01	0
R5006DNP	0662057M01	0
R5005DNP	0662057M01	0
R5004DNP	0662057M01	0
R408DNP	0662057M01	0
R7017	0662057M01	0
R7007	0662057M01	0
R7006	0662057M01	0
R1004	0662057M01	0
R406	0662057M01	0
R311	0662057M01	0
R205	0662057M01	0
Q502	4809939C34	EMB10
Q240	4809579E48	FDC6306P
Q701	4809579E55	FDG6306P
Q700	4809579E55	FDG6306P
U301DNP	480994000	DTC114YE
Q7004	4862821A04	CPT-230
Q7000	4809579E51	FDZ206P

Q7003	4809939C39	EMD9
Q7002	4809579E52	FDZ204P
Q7001	4809579E52	FDZ204P
Q3800	4809579E52	FDZ204P
Q3700	4809579E52	FDZ204P
Q1000DNP	4809607E11	MMBT2131
D5000	PT48BTNA28	BAS16HT1
FL120	PT91BTNA08	LE97C
FL110	PT91BTNA07	LH10C
S24DNP	PT39BTNA20	SWITCH