

**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	Description
C101	2113743N02	CAP CHIP 0.75 PF +/- .25PF COG
C121	2113743N16	CAP CHIP 3.9 PF +/- .25PF COG
C122	2113743N16	CAP CHIP 3.9 PF +/- .25PF COG
C131	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C132	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C133	2311049A76	CAP TANT CHIP 2.2UF 10% 6V
C134	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C145	2113743N28	CAP CHIP 12.0 PF 5% COG
C150	0888600M24	CAP,FILM,8200PF,+5%,-5%,50V-DC
C1501	2113743N40	CAP CHIP 39.0 PF 5% COG
C1503	2113928T01	CAP CER CHIP 1.0 UF 6.3V 0402
C1504	2113743N28	CAP CHIP 12.0 PF 5% COG
C1505	2113743N28	CAP CHIP 12.0 PF 5% COG
C1506	2113743N28	CAP CHIP 12.0 PF 5% COG
C1507	2113743N28	CAP CHIP 12.0 PF 5% COG
C151	2113743L15	CAP CHIP 820 PF 10% X7R
C152	2113743L07	CAP CHIP 390 PF 10% X7R
C153	2113743L11	CAP CHIP 560 PF 10% X7R
C154	2113743L19	CAP CHIP 1200 PF 10% X7R
C155	0888600M24	CAP,FILM,8200PF,+5%,-5%,50V-DC
C156	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C157	2113743N54	CAP CHIP 150 PF 5% COG
C159	2113743N52	CAP CHIP 120 PF 5% COG
C174	2113743N22	CAP CHIP 6.8 PF + -.5PF COG
C175	2113743N28	CAP CHIP 12.0 PF 5% COG
C176	2113743L41	CAP CHIP 10000 PF 10% X7R
C177	2113743N40	CAP CHIP 39.0 PF 5% COG
C2814	2113743N28	CAP CHIP 12.0 PF 5% COG
C3002	2113743N28	CAP CHIP 12.0 PF 5% COG
C3003	2113743N28	CAP CHIP 12.0 PF 5% COG
C3005	2113743N28	CAP CHIP 12.0 PF 5% COG
C3006	2113743N28	CAP CHIP 12.0 PF 5% COG
C302	2113743N28	CAP CHIP 12.0 PF 5% COG
C309	2113743F18	CAP CHIP 2.2 UF 16V +80-20%
C314	2113743F18	CAP CHIP 2.2 UF 16V +80-20%
C330	2113743N40	CAP CHIP 39.0 PF 5% COG
C332	2113743N28	CAP CHIP 12.0 PF 5% COG
C333	2113743N28	CAP CHIP 12.0 PF 5% COG
C334	2113743N28	CAP CHIP 12.0 PF 5% COG
C602	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C701	2113743L41	CAP CHIP 10000 PF 10% X7R
C705	2113743L41	CAP CHIP 10000 PF 10% X7R
C8001	2113743N28	CAP CHIP 12.0 PF 5% COG
C8002	2113743N28	CAP CHIP 12.0 PF 5% COG
C8004	2113743N28	CAP CHIP 12.0 PF 5% COG

C8005	2113743N40	CAP CHIP 39.0 PF 5% COG
C8006	2113743N40	CAP CHIP 39.0 PF 5% COG
C8007	2113743N40	CAP CHIP 39.0 PF 5% COG
C8008	2113743N28	CAP CHIP 12.0 PF 5% COG
C8009	2113743N38	CAP CHIP 33.0 PF 5% COG
C801	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C8011	2113743N28	CAP CHIP 12.0 PF 5% COG
C802	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C803	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C805	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C806	2113743L41	CAP CHIP 10000 PF 10% X7R
C808	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C809	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C810	2113743L41	CAP CHIP 10000 PF 10% X7R
C811	2113743L41	CAP CHIP 10000 PF 10% X7R
C812	2113743L41	CAP CHIP 10000 PF 10% X7R
C813	2113743L41	CAP CHIP 10000 PF 10% X7R
C814	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C815	2113743L41	CAP CHIP 10000 PF 10% X7R
C816	2113743L41	CAP CHIP 10000 PF 10% X7R
C818	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C819	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C820	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C8204	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C8205	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C8206	2113743N40	CAP CHIP 39.0 PF 5% COG
C821	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C822	2170282K01	CAP,TANTALUM,10UF,+20,-20,6.3V
C823	2113743N40	CAP CHIP 39.0 PF 5% COG
C8230	2311049A89	CAP TANT CHIP 22 UF 4V 10%
C8231	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C8232	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C8233	2113928T01	CAP CER CHIP 1.0 UF 6.3V 0402
C8234	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C8235	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C8238	2113743N38	CAP CHIP 33.0 PF 5% COG
C8239	2113743N38	CAP CHIP 33.0 PF 5% COG
C8240	2113743L17	CAP CHIP 1000 PF 10% X7R
C8241	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C8242	2113928R03	CHIP CAPACITOR (CERAMIC),MONOL
C8249	2113743L41	CAP CHIP 10000 PF 10% X7R
C825	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C8250	2113743N30	CAP CHIP 15.0 PF 5% COG
C8251	2113743N28	CAP CHIP 12.0 PF 5% COG
C8252	2113743N03	CAP CHIP 1.0 PF +-.25PF COG
C8253	2113743N20	CAP CHIP 5.6 PF + -.5PF COG
C8255	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C826	2113743M24	CAP CHIP 100000 PF +80-20% Y5V

C827	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C828	2113743L41	CAP CHIP 10000 PF 10% X7R
C829	2113743N38	CAP CHIP 33.0 PF 5% COG
C830	2113743N19	CAP CHIP 5.1 PF + -.5PF COG
C890	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C900	2113743N30	CAP CHIP 15.0 PF 5% COG
C901	2113743N30	CAP CHIP 15.0 PF 5% COG
C902	2113743N26	CAP CHIP 10.0 PF 5% COG
C903	2113743N26	CAP CHIP 10.0 PF 5% COG
C907	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C908	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C909	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C910	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C911	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C915	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C916	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C917	2113928P04	CAP,CER,1UF,,+20%,-20%,,0603
C921	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C922	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C926	2113743L21	CAP CHIP 1500 PF 10% X7R
C927	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C929	2113743N26	CAP CHIP 10.0 PF 5% COG
C930	2113948E11	CAP,NTWK,,,+20%,-20%,10V-DC
C931	2113743N40	CAP CHIP 39.0 PF 5% COG
C932	2113743N40	CAP CHIP 39.0 PF 5% COG
C933	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C934	2113946D02	CHIP CAPACITOR (CERAMIC),MONOL
C937	2113743N26	CAP CHIP 10.0 PF 5% COG
C938	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C939	2113743N26	CAP CHIP 10.0 PF 5% COG
C940	2113928C12	CAP,CER,10UF,,+10%,-10%,,0805
C941	2113743N40	CAP CHIP 39.0 PF 5% COG
C942	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C943	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C945	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C948	2113928C12	CAP,CER,10UF,,+10%,-10%,,0805
C949	2113928C12	CAP,CER,10UF,,+10%,-10%,,0805
C952	2113743N26	CAP CHIP 10.0 PF 5% COG
C953	2113743N26	CAP CHIP 10.0 PF 5% COG
C954	2113743N26	CAP CHIP 10.0 PF 5% COG
C955	2113743N26	CAP CHIP 10.0 PF 5% COG
DS504	4870370A35	DIODE,,,,,,,,,SIDE-FIRE TRI
DS505	4870370A35	DIODE,,,,,,,,,SIDE-FIRE TRI
F100	6589735L01	FUSE FAST 32V 2.0A 0603
FL130	9109474K05	FLTR,SAW
FL131	2470326F03	IDCTR,BEAD,0NH,0%,,0OHM,,,(EM
FL900	2470326F03	IDCTR,BEAD,0NH,0%,,0OHM,,,(EM
J100	0988612M01	CONN,RCPT,,,,RF SWITCH, SMT

J600	2870333D01	CONN,PLG,F,SM,,SLDR,40,GOLD OV
J700	0970312K01	CONN,ZIF,F,12CONT,,SN/PB,SM,,S
L121	2409154M40	FIXED INDUCTOR,CHIP,22NH,5%,,
L122	2470327F01	IDCTR,PWR,,,,,,LOWER PROFILE
L123	2409154M40	FIXED INDUCTOR,CHIP,22NH,5%,,
L124	2409154M73	FIXED INDUCTOR,CHIP,68NH,5%,,4
L125	2409154M73	FIXED INDUCTOR,CHIP,68NH,5%,,4
L128	2409154M04	FIXED INDUCTOR,CHIP,1.8NH,,,1
L129	2409154M61	FIXED INDUCTOR,CHIP,6.8NH,5%,,
L130	2409154M61	FIXED INDUCTOR,CHIP,6.8NH,5%,,
L152	2489970L37	IDCTR,WW,270NH,2,,,,,HI_Q_160
M100	3986706P01	CONT,BAT
M3	3986707P01	CONT,,,SIM LOCK
M4	3970330E01	CONT,SPKR,,,,,,AU
M5	0970312M01	CONN,POGO PIN,,,,,,PIN
PCB	8486600P01	PCB,COMP,U-FLIP
Q901	4813824B11	TSTR PNP 30V HI BETA
Q903	4813824M28	TSTR NPN 40V .2A GEN PURP
Q909	4888182N01	SENSOR,,,PHOTO IC LIGHT SENSO
R103	0662057M01	RES. CHIP 0 5% 20X40
R105	2409154M31	FIXED INDUCTOR,CHIP,3.9NH,,,2
R150	0662057M72	RES. CHIP 820 5% 20X40
R1501	0662057M43	RES. CHIP 51 5% 20X40
R1502	0662057M43	RES. CHIP 51 5% 20X40
R151	0662057M78	RES. CHIP 1500 5% 20X40
R152	0662057M67	RES. CHIP 510 5% 20X40
R153	0662057M62	RES. CHIP 330 5% 20X40
R154	0662057M64	RES. CHIP 390 5% 20X40
R155	0662057N19	RES. CHIP 68K 5% 20X40
R302	0662057M01	RES. CHIP 0 5% 20X40
R305	0662057M01	RES. CHIP 0 5% 20X40
R310	0687578N09	THMS,,SM,0402,,470OHM,,3%,CHIP
R313	0662057M72	RES. CHIP 820 5% 20X40
R503	0662057M98	RES. CHIP 10K 5% 20X40
R601	0662057M78	RES. CHIP 1500 5% 20X40
R602	0609591M07	RES CHIP DUAL 33 5% 0.63W
R713	0662057N30	RES. CHIP 200K 5% 20X40
R714	0662057N23	RES. CHIP 100K 5% 20X40
R801	0662057M92	RES. CHIP 5600 5% 20X40
R803	0662057M01	RES. CHIP 0 5% 20X40
R805	0662057V02	RES CHIP 10K 1% 1/16W
R810	0662057M74	RES. CHIP 1000 5% 20X40
R8201	0662057M52	RES. CHIP 120 5% 20X40
R8202	0662057M52	RES. CHIP 120 5% 20X40
R8205	0662057M59	RES. CHIP 240 5% 20X40
R8206	0662057M59	RES. CHIP 240 5% 20X40
R8209	0662057M52	RES. CHIP 120 5% 20X40
R8210	0662057M52	RES. CHIP 120 5% 20X40

R8222	0662057M98	RES. CHIP 10K 5% 20X40
R8224	0662057M98	RES. CHIP 10K 5% 20X40
R8226	0662057N15	RES. CHIP 47K 5% 20X40
R8227	0662057N06	RES. CHIP 20K 5% 20X40
R8228	0662057N15	RES. CHIP 47K 5% 20X40
R8230	0662057M01	RES. CHIP 0 5% 20X40
R9001	0662057M01	RES. CHIP 0 5% 20X40
R9002	0662057M81	RES. CHIP 2000 5% 20X40
R9006	0662057N16	RES. CHIP 51K 5% 20X40
R9007	0662057N28	RES. CHIP 160K 5% 20X40
R9008	0662057N19	RES. CHIP 68K 5% 20X40
R9009	0662057N17	RES. CHIP 56K 5% 20X40
R901	0662057N01	RES CHIP 12K 5% 20X40
R9010	0662057M01	RES. CHIP 0 5% 20X40
R9011	0662057M01	RES. CHIP 0 5% 20X40
R9012	0662057M81	RES. CHIP 2000 5% 20X40
R9014	0662057M57	RES. CHIP 200 5% 20X40
R9015	0662057M76	RES. CHIP 1200 5% 20X40
R903	0662057W13	RES CHIP 3.3 5%
R905	0609591M38	RES,CF,12000OHM,5%,.063W,SM,04
R906	0662057N31	RES. CHIP 220K 5% 20X40
R907	0662057A22	CHIP RES 75 OHMS 5%
R908	0662057A22	CHIP RES 75 OHMS 5%
R909	0662057M74	RES. CHIP 1000 5% 20X40
R910	0662057M98	RES. CHIP 10K 5% 20X40
R911	0662057M90	RES. CHIP 4700 5% 20X40
R912	0662057N32	RES. CHIP 240K 5% 20X40
R913	0662057A47	CHIP RES 820 OHMS 5%
R914	0662057A51	CHIP RES 1200 OHMS 5%
R916	0662057M90	RES. CHIP 4700 5% 20X40
R918	0662057M46	RES. CHIP 68 5% 20X40
R920	0662057N15	RES. CHIP 47K 5% 20X40
R921	0662057N15	RES. CHIP 47K 5% 20X40
R948	0662057N01	RES CHIP 12K 5% 20X40
R979	0662057V14	RES CHIP 30K 1% 1/16W
R980	0662057V02	RES CHIP 10K 1% 1/16W
RT900	0685660C01	THERMISTOR 3% 0402
SH100	0186792P01	ASSY,SHIELDS,,NEPTUNE
SH150	2686703P01	SHIELD,,,,ALGAE
SH200	2686705P01	SHIELD,,,,DIAMOND HD
SH300	2686702P01	SHIELD,,,,ATHENA
SK1	3986722P01	CONT,,,,,,,,,SIDE SW
SK2	3986722P01	CONT,,,,,,,,,SIDE SW
SK3	3986722P01	CONT,,,,,,,,,SIDE SW
SK4	3986722P01	CONT,,,,,,,,,SIDE SW
U150	5109923D60	IC,CUST,,,,,,SIGE, ALGAE, 48P
U300	5189227L08	IC,AMP,,,,,,,,,ATHENA 850/PCS
U600	5187970L15	IC USB TRANS FULL-SPEED

U701	5102834Y95	IC,FLSH,,64MB/64MB/32MB,,,,,ST
U800	5102834Y94	IC,MICROP,,,,,16BITS,,NEPTUNE
U900	5188450M15	IC,CUST,,,,,,SEAWEED2 VER 2.1
U920	5187970L26	IC,,,,,BGA,,,DH3 CHGR
U951	5102834Y91	CONV,DC TO DC CONVERTER,,,,,,
U952	5102834Y90	IC,DISP DRVR,16-BIT I2C LED DI
U953	5109522E89	IC,DECODER/DEMUX,,,,,,1-OF-
U954	5102834Y89	IC,PCM,BASED HI-GRADE SND GEN
U955	5162852A16	IC,COMPTR,LMC7211,SM,,1PER PKG
VR805	4870370A33	DIODE,SHTK,BAT960,,,,,1A,20V,,S
Y900	4809995L13	XTAL 32.768KHZ 30PPM 1.5X4.1MM
Y901	4809612J43	RESON,QRTZ,26MHZ,+/-10,FUND,,-