

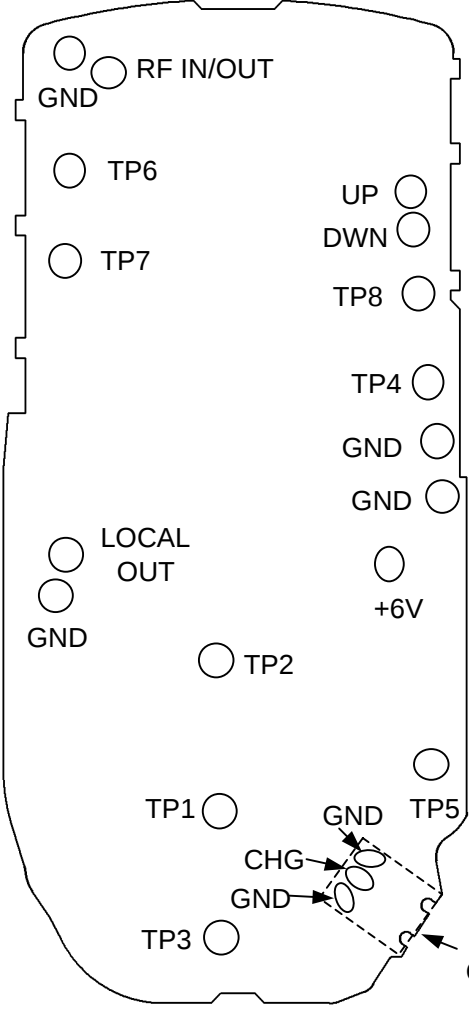
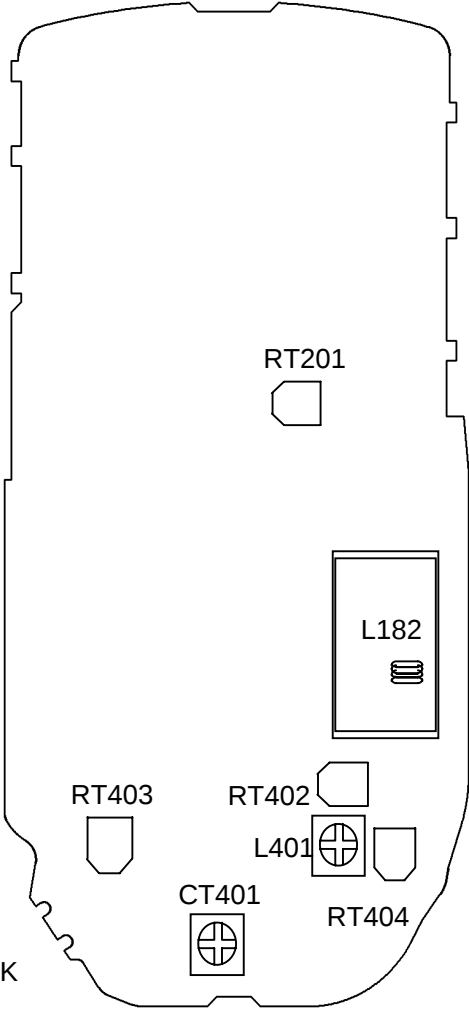
ALIGNMENT PROCEDURE FOR GMR2059-2CK (AMWUT027)

TRANSMITTER

STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	POWER OFF	-	-	CONNECT DC POWER SUPPLY TO THE BATT POWER SUPPLY PATTERN ON THE PCB.	-	INPUT VOLTAGE : DC6.0V/2A
2	TX	8	467.5625MHz	CONNECT RF WATTMETER TO THE ANTENNA PATTERN ON THE PCB.	RT201	KEY THE TRANSMITTER WITH PTT, AND ADJUST THE OUTPUT POWER AT $0.50W \pm 0.05W$
3	TX	1	462.5625MHz	CONNECT FREQUENCY COUNTER TO THE ANTENNA PATTERN ON THE PCB WITH AN APPROPRIATE ATTENUATOR.	CT401	KEY THE TRANSMITTER WITHOUT ANY MODULATION. ADJUST TRANSMISSION FREQUENCY TO $462.562500MHz \pm 100Hz$
4	TX	1	462.5625MHz	CONNECT MODULATION ANALYZER TO THE ANTENNA PATTERN ON THE PCB. HPF:OFF LPF:3KHz DE-EMP:OFF CONNECT OSCILLOSCOPE TO MODULATION OUTPUT OF THE MODULATION ANALYZER. CONNECT AUDIO GENERATOR TO TP3(BAL) WAVEFORM:20Hz SQUARE WAVE MAGNITUDE:1.5Vp-p(DC COUPLING)	RT402	KEY THE TRANSMITTER, AND ADJUST RT402 AS THE WAVEFORM ON THE OSCILLOSCOPE COMES TO BE A CERTAIN SQUARE WAVE
5	TX	1 +CTCSS No.27	462.5625MHz	CONNECT MODULATION ANALYZER TO THE ANTENNA PATTERN ON THE PCB. HPF:OFF LPF:15KHz DE-EMP:OFF INJECT 1KHz 60mVp-p SINE WAVE TO MICROPHONE JACK FROM AUDIO GENERATOR.	RT403	KEY THE TRANSMITTER, AND ADJUST RT201 AS THE MODULATION ANALYZER INDICATES $\pm 2.2KHz \pm 0.1KHz$ DEVIATION.

RECEIVER

STEP	MODE	CHANNEL	FREQUENCY	CONDITION	ADJUST	METHOD
1	RX	1	462.5625MHz	CONNECT DC VOLTMETER TO TP2 INJECT -47dBm RF SIGNAL WITHOUT MODULATION FROM SSG TO THE ANTENNA PATTERN ON THE PCB.	L403	ADJUST L403 AS THE VOLTMETER INDICATES $1.3V \pm 0.05V$
2	RX	1	462.5625MHz	CONNECT SINAD METER TO SPEAKER JACK WITH 16Ω DUMMY LOAD. INJECT RF SIGNAL FROM SSG AS FOLLOWING CONDITION. MAGNITUDE:AS LARGE AS THE RECEIVER OBTAINS 10dB SINAD SENSITIVITY. DEVIATION: $\pm 1.5KHz$ AF FREQUENCY:1KHz	RT404	TURN TO C.W. MAX, SET TO 10dB SINAD FIRST. TURN TO C.C.W. MAX. ADJUST SLOWLY TO THE POINT WHERE WAVEFORM APPEARS AT THE SPEAKER OUT. (C.W.)

ALIGNMENT PROCEDURE		FORM-4	REFERENCE DIAGRAM NO.				PAGE			
MODEL		UNIT		BLOCK		ISSUE DATE		ISSUED		
AMWUT027						2007/1/29		IWABUCHI		
TITLE		ADJUST POINT		SUB TITLE				REF DIAGRAM		
1. MAIN PCB B101 (TOP VIEW)  2. MAIN PCB B101 (BOTTOM VIEW)  TP1 : VCONT TP2 : DISC OUT(De_Em) LOCAL OUT TP3 : BAL TP4 : AF OUT TP5 : MIC IN TP6 : PTT TP7 : BOOST TP8 : BATT SEL +6V:DC 6V RF IN/OUT UP DWN CHG:DC 11V with CHARGE JIG L182 : VCONT ADJ. L401 : DISC.ADJ. RT201 : TX POWER ADJ. CT401 : FREQ. ADJ. RT402 : MOD. BALANCE ADJ RT403 : MAX DEV. ADJ. RT404 : SQ ADJ.										

ALIGNMENT PROCEDURE										FORM - 3		PAGE		
MODEL			UNIT			BLOCK			ISSUE DATE			ISSUED		
AMWUT027									2007/1/29			IWABUCHI		
TITLE	TEST MODE					SUB TITLE		CONFIRMATION			REF DIAGRAM			
TEST MODE 1.TEST MODE IN PRESS AND HOLD [mon], [menu] AND TURN POWER ON (Press and Hold [pwr]) WILL BE STARTED LCD TEST AND LED WILL TURN ON FOR 2sec. 2.TEST MODE OUT TURN POWER OFF 3.TEST MODE ITEM *MODE CHANGE : PRESS [menu] . *VOLUME LEVEL CHANGE : PRESS [call] (Volume Up) OR [ch] (Volume Down) VOLUME LEVEL SETS TO 4 BY CHANGING TEST MODE OR CH. (BUT VOLUME LEVEL CAN NOT BE CHANGED IN LCD TEST MODE.) 1)LCD TEST MODE 2)TX TEST MODE 3)SUBCODE ENCODE TEST MODE (NOT USE) 4)TX CALL TEST MODE (NOT USE) 5)VOX TEST MODE (NOT USE) 6)RX TEST MODE (NOT USE) 7)SUBCODE DECODE TEST MODE 8)STANDBY TEST MODE (NOT USE) <u>USE TX TEST MODE ONLY</u> <u>* SCRM SETTING IS FRS CH ONLY(CH8 ~CH14) (NOT USE)</u> 4.TEST MODE PROPER 1)LCD TEST MODE AFTER LOGGING IN TEST MODE, EACH LCD SEGMENT IS GRADUALLY DISPLAYED(LCD TEST MODE) 2)TX TEST MODE WHEN THE UNIT ENTERS THIS TEST MODE , CH1 AUTOMATICALLY DISPLAY. PRESS [▲] OR [▼] : <USE CH> CH1:462.5625MHz (GMRS) CH8:467.5625MHz (FRS) PRESS [▲] OR [▼] FOR 500ms. → AUTO REPEAT FUNCTION ON. PRESS [PTT] , "tx" ICON WILL BE DISPLAYED ON LCD. RX MUTE ON. BATTERY SAVE FUNCTION IS ALWAYS OFF. [mon] & [pwr] FUNCTIONS ARE INEFFECTIVE.														
REVISIONS:	REV. CODE													
	DATE													
	LOT # / RN #													
	REVISED BY													
	CHECKED BY													