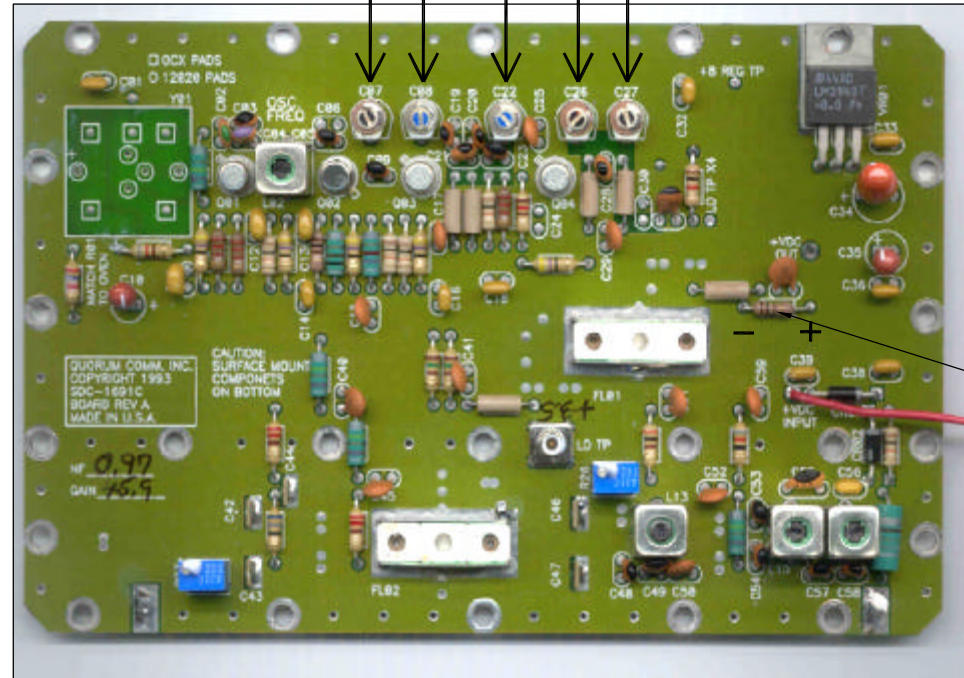


NOTES: Unless Otherwise Specified

- DO NOT REMOVE BOARD FROM CASE
- APPLY 12 VDC TO DOWNCONVERTER RED WIRE OR POWER UNIT VIA COAX
- CONNECT ANALOG VOLTMETER ACROSS 100 OHM RESISTOR AS SHOWN. SET VOLTMETER TO APPROX. 1-2VDC SCALE
- ALLOW UNIT 10 MINUTE WARMUP
- DO NOT ADJUST C07 UNLESS YOU HAVE ACCESS TO A FREQUENCY COUNTER AND OR SPECTRUM ANALYZER THAT CAN MEASURE 1.5535GHz
- CAUTION: ALIGN TRIMMERS IN THIS EXACT ORDER, ONE TRIMMER AT A TIME. IT IS POSSIBLE TO GET THE UNIT SO FAR OUT OF ALIGNMENT THAT IT REQUIRES A SPECTRUM ANALYZER TO REPAIR.
- MONITORING THE VOLTAGE ACROSS THE 100 OHM RESISTOR, VERY SLOWLY ROTATE C22 FOR MAXIMUM VOLTAGE. IT IS BEST TO USE A NON-METALLIC ADJUSTMENT TOOL TO AVOID UNWANTED INTERACTION FROM THE METAL TIP. IF THE TRIMMER DOES NOT OPERATE SMOOTHLY, THEN ROTATE THE TRIMMER SEVERAL TIMES BEFORE ALIGNMENT.
- USING THE SAME PROCEDURE AS ABOVE, ADJUST C08 FOR MAXIMUM VOLTAGE.
- ADJUST C26
- ADJUST C27
- THESE FOUR TRIMMERS INTERACT SO REPEAT STEPS 7-10 UNTIL NO MORE INCREASE OF VOLTAGE CAN BE NOTED. THE VOLTAGE SHOULD BE BETWEEN A MINIMUM OF 1 VOLT AND A MAXIMUM OF 2.5 VOLTS DC. THE ALIGNMENT OF THESE TRIMMERS HAS A DRAMATIC EFFECT ON THE DOWNCONVERTER PERFORMANCE, ESPECIALLY OVER TEMPERATURE.
- IF YOU HAVE ACCESS TO A FREQUENCY COUNTER AND SPECTRUM ANALYZER, THEN THE OSCILLATOR CAN BE MONITORED BY CONNECTING USING A SMB FEMALE CONNECTOR TO THE LO TEST POINT MARKED "LO TP"
- WHILE MONITORING LO FREQUENCY, ADJUST C07 FOR A MAXIMUM INCREASE IN FREQUENCY. THIS SETTING IS CRITICAL. DO NOT ADJUST C07 WITHOUT PROPER EQUIPMENT.
- MONITORING LO TP, ADJUST INDUCTOR L02 FOR A FINAL FREQUENCY OF 1553.500MHz. OSCILLATOR LEVEL SHOULD BE APPROX. 0dBm TO +3dBm.
- DO NOT ADJUST ANY OTHER INDUCTORS OR VARIABLE RESISTORS ON CIRCUIT BOARD. THIS COMPLETES LOCAL OSCILLATOR (LO) ALIGNMENT.

REVISION BLOCK					
REV	ECO #	ZONE	DESCRIPTION OF CHANGE(S)	DATE	CHANGED/APPROVED
A			INITIAL RELEASE		AFN

(DO NOT ADJUST)
 ADJUST SECOND
 ADJUST FIRST
 ADJUST THIRD
 ADJUST LAST



VOLTMETER ACROSS THIS 100 OHM RESISTOR

DWG. NO. 860872
 SH. 1
 REV. A

ITEM #	QTY.	PART NO.	DESCRIPTION
UNLESS NOTED OTHERWISE TOLERANCE BLOCK:		PROPRIETARY THIS DOCUMENT AND THE DATA DISCLOSED HEREWITH IS NOT TO BE REPRODUCED, USED, OR DISCLOSED IN WHOLE OR IN PART TO ANYONE WITHOUT WRITTEN AUTHORIZATION FROM QUORUM COMMUNICATIONS.	
DIMENSIONS ARE IN INCHES		QUORUM COMMUNICATIONS IRVING, TEXAS 75063 (972) 915-0256	
DECIMALS	ANGULAR	TITLE	
XX ±.010	±1°	TUNE PROCEDURE	
XXX ±.005		DOWNCONVERTER	
XXXX ±.0005		DRAWING NO. 860872	
DO NOT SCALE DRAWING	APPROVALS	DATE	REV
MATERIAL	DRAWN BY AFN	6/27/03	A
FINISH	APPROVED BY		
	NEXT ASSY.	SCALE NONE	COMP. FILE 8608721A
		SHEET 1	OF 1