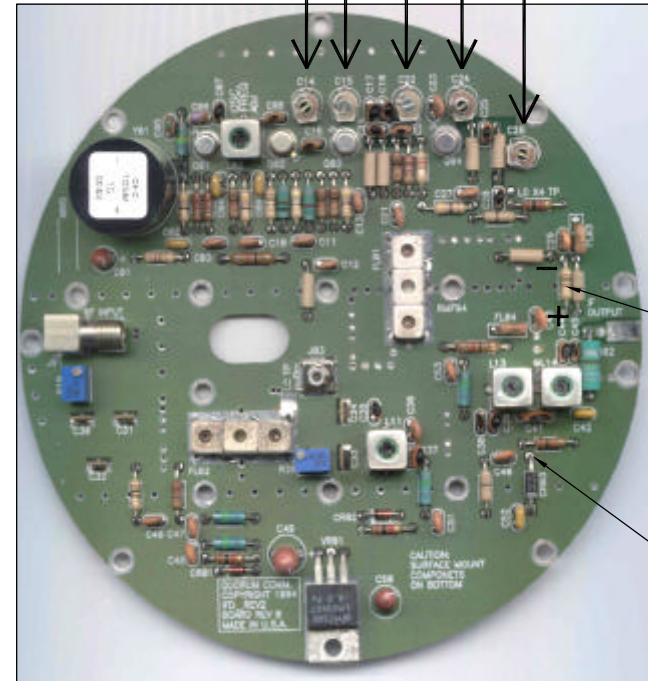


NOTES: Unless Otherwise Specified

1. DO NOT REMOVE BOARD FROM CASE
2. APPLY 12 VDC TO DOWNCONVERTER USING THE TYPE "N" CONNECTOR. POSITIVE VOLTAGE TO THE CENTER PIN, MINUS VOLTAGE TO THE CASE. POWER CAN ALSO BE APPLIED TO ANODE OF CR03 (+12VDC) CONNECT (-) TO THE CASE.
3. CONNECT ANALOG VOLTMETER ACROSS 100 OHM RESISTOR (BROWN-BLACK-BROWN) AS SHOWN. SET VOLTMETER TO APPROX. 1-2VDC SCALE
4. ALLOW UNIT 10 MINUTE WARMUP
5. DO NOT ADJUST C14 UNLESS YOU HAVE ACCESS TO A FREQUENCY COUNTER AND OR SPECTRUM ANALYZER THAT CAN MEASURE 1.5535GHz (WEFAX IFD 1691 VERSION) OR 1.565GHz (HRPT IFD 1702.5 VERSION)
6. 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. IT MAY BE HELPFUL TO DRAW A DIAGRAM OF THE CURRENT TRIMMER SETTINGS IN CASE YOU GET THE UNIT SO FAR OUT OF ALIGNMENT THAT YOU NEED TO START OVER. MAKE MINOR ADJUSTMENTS, ONE TRIMMER AT A TIME
7. 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.
8. USING THE SAME PROCEDURE AS ABOVE, ADJUST C15 FOR MAXIMUM VOLTAGE.
9. ADJUST C24
10. ADJUST C26
11. 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.
12. THE FOLLOWING STEPS USUALLY ARE NOT NECESSARY. PREFORM STEPS 13 THROUGH 16 ONLY IF YOU HAVE THE PROPER EQUIPMENT.
13. 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" (J03)
14. WHILE MONITORING LO FREQUENCY, ADJUST C14 FOR A MAXIMUM INCREASE IN FREQUENCY. THIS SETTING IS CRITICAL. DO NOT ADJUST C14 WITHOUT PROPER EQUIPMENT.
15. MONITORING LO TP, ADJUST INDUCTOR L02 FOR A FINAL FREQUENCY OF 1553.500MHz OR 1565.000MHz DEPENDING ON MODEL. OSCILLATOR LEVEL SHOULD BE APPROX. 0dBm TO +3dBm.
16. 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
 APPLY +12VDC HERE TO POWER DOWNCONVERTER (ANODE CR03)

DWG. NO. 860874
 SH. 1
 REV. A

ITEM #	QTY.	PART NO.	DESCRIPTION
UNLESS NOTED OTHERWISE TOLERANCE BLOCK: DIMENSIONS ARE IN INCHES		DECIMALS	ANGULAR
XX	±.010		±1°
XXX	±.005		
XXXX	±.0005		
DO NOT SCALE DRAWING		APPROVALS	DATE
MATERIAL		DRAWN BY	7/7/03
FINISH		APPROVED BY	
NEXT ASSY.		SCALE	COMP. FILE
		NONE	8608741A

 QUORUM COMMUNICATIONS	
IRVING, TEXAS 75063 (972) 915-0256	
TITLE TUNE PROCEDURE IFD DOWNCONVERTER	
SIZE	REV
A	A
DRAWING NO. 860874	
SHEET	OF
1	1