

HOPPING UP THE 8719 RECEIVER

THE SECOND HARMONIC ANYWAY. SO T3 IS NOT NEEDED AS A DOUBLER. BUT, DON'T REMOVE IT.

WE ARE USING IT TO FILTER Q3'S SUPPLY VOLTAGE. THUS OUR OSCILLATOR MAINTAINS A CONSTANT PEAK TO PEAK VOLTAGE WHILE BEING PULLED AROUND BY D3. HENCE, NO DROP-OFF AT EXTREME ENDS OF THE CLARIFIER.

9. WIRE THE CLARIFIER AS SHOWN USING THE UNCONNECTED END FOR THE CONNECTION TO THE REGULATED +9 VOLTS.

NOTE: DOUBLE-CHECK YOUR WORK NOW. USING THE NEW SCHEMATIC IN FIGURE ONE TO COMPARE YOUR WORK TO. IF EVERYTHING LOOKS GOOD, HOOK UP POWER AND TURN THE UNIT ON. IF ALL IS STILL OK, INSTALL THE TOP COVER BEFORE DOING THE ALIGNMENT. IT MAY AFFECT YOUR ADJUSTMENTS.

ALIGNMENT PROCEDURE

1. SWITCH TO CHANNEL 40 (OR 23) AM. TURN THE CLARIFIER FULLY CLOCKWISE. ADJUST CT1 FOR MAXIMUM "UP" SLIDE. NEXT ADJUST THE "CLARIFIER KNOB" FOR "CENTER" SLOT. WHEN SET, BE CAREFUL "NOT" TO MOVE THE KNOB.

2. SWITCH TO LOWER SIDEBAND. INJECT A 1000Hz TONE INTO THE MICROPHONE. ADJUST CT2 FOR A READING OF 27.4040 ON YOUR FREQUENCY COUNTER. NEXT, ADJUST THE KNOB FOR A READING OF 27.3990 ON THE COUNTER, WHILE STILL INJECTING THE TONE. MARK THIS SPOT ON THE RADIO. IT IS YOUR 5KC DOWN POSITION.

NOTE: THIS COMPLETES THE CONVERSION. THE RADIO USED FOR EXPERIMENTATION WAS A MIDLAND 79-892. A CLARIFIER MODIFICATION HAD ALREADY BEEN PERFORMED ON THE UNIT AND THE CLARIFIER KNOB MOVED TO THE FRONT PANEL.

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• LESCOMM

MANY HAVE STATED NOT ENOUGH ATTENTION IS BEING PAID TO THE RECEIVER OF MULTI FREQUENCY CONVERTED RADIOS! I AGREE WITH THAT STATEMENT AND INTEND TO DO SOMETHING ABOUT IT. THAT SOMETHING IS THE FOLLOWING MODIFICATION FOR THE SINGLE CONVERSION 8719 CHASSIS. (I.E., THE UNIDEN WASHINGTON, COBRA 140GTL AND 142GTL, ETC.)

1. CHANGE R39 TO A 330 OHM 1/4 WATT RESISTOR.
2. BRIDGE L9 WITH A 1pf CAP, FROM THE PRIMARY HOT SIDE TO THE SECONDARY HOT SIDE. (SIDES OPPOSITE POWER SUPPLY AND GROUND PINS.)
3. PARALLEL C42 AND C44 WITH 1pf CAPS OR REPLACE THEM WITH 3pf CAPS. DO NOT GO ANY LARGER! 3pf IS WHAT THE VALUE MUST BE.
4. REPLACE C166 (IN FT2'S HOLES) WITH A 33pf CAP. IF UNIT HAS FT2, LEAVE FT2 IN PLACE.

5.REMOVE R58 AND REPLACE WITH A 10 OHM RESISTOR. KEEP THE LEADS SHORT! IF THE RADIO GOES INTO OSCILLATIONS (NOTED BY A REPEATED CHIRPING SOUND FROM SPEAKER), YOU WILL HAVE TO INCREASE THE RESISTANCE OF THE NEW R58. GO UP IN 50 OHM INCREMENTS.

TUNEUP

1.GO TO THE CENTER OF YOUR FREQUENCY SPREAD. ADJUST L10, L7, L6, & L5 HERE FOR PEAK "WEAK" SIGNAL READING ON THE S/RF METER. DON'T TRY TO ADJUST THEM USING AN "S9" SIGNAL!

2.GO TO YOUR HIGHEST FREQUENCY NOW AND ADJUST L9 FOR PEAK.

3.NOW GO TO YOUR LOWEST FREQUENCY AND ADJUST L8 FOR PEAK. BOUNCE BACK AND FORTH BETWEEN THESE TWO ADJUSTMENTS UNTIL YOU A SATISFACTORY BALANCE OF RECEIVE GAIN.

NOTE: YOU DON'T HAVE TO HAVE A SIGNAL GENERATOR TO DO THE ALIGNMENT. (IT HELPS OF COURSE.) YOU CAN JUST USE BACKGROUND NOISE AND GET IT PRETTY CLOSE, BUT LISTEN CAREFULLY! ONE THING YOU MAY NOTICE AS SOON AS YOU START USING THE RADIO IS A SLIGHT INCREASE IN BLEEDOVER. THIS HAPPENS WHEN YOU INCREASE THE GAIN OF THE IF STAGE SUCH AS WE'VE DONE HERE. IF THE BLEEDOVER IS TOO BAD FOR YOU, YOU CAN ORDER AN FT2 FILTER AND INSTALL IT IN SERIES WITH THE EXISTING ONE (OR ADD IT IF YOUR RADIO DOESN'T HAVE IT.) OR PUTTING THE OLD R58 BACK IN. A WORD OF CAUTION HERE, DON'T TRY REPLACING R58 WITH A POTENTIOMETER. YOU'LL BE TUNING IN ALL KINDS OF AM BROADCAST RADIO STATIONS! IF YOUR RADIO DOES NOT HAVE AN RF GAIN, I SUGGEST YOU INSTALL ONE. YOU'RE GOING TO NEED IT NOW!

THE UNIDEN PRESIDENT HR2510 CONVERSION

• ROY A. WIGLESWORTH

THIS IS A VERY NICE TEN METER AMATEUR TRANSCEIVER FROM UNIDEN. ITS' DISPLAY GIVES FREQUENCY OUT TO FOUR PLACES AFTER THE DECIMAL POINT.(I.E.,28.XXXX) AN EXTREMELY VERSITILE UNIT, CAPABLE OF COVERAGE FROM 26.0000 TO 29.9999MHZ.

PINS 34 & 35 ARE GROUNDED TOGETHER ON THE BOTTOM SIDE OF THE SYNTHESIZER BOARD.

1.CUT THE PCB PATTERN TO DISCONNECT PINS 34 & 35 FROM GROUND SO THAT BOTH ARE AT A FLOATING STATE.

2.CONNECT A 10K OHM 1/4 WATT RESISTOR BETWEEN THE JUNCTION OF PINS 34 & 35 TO THE +5VDC LINE PATTERN.(WHERE R181·187 ARE CONNECTED TOGETHER.)