

ANOTHER JACKSON FREQUENCY MOD.

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• SAM, T&S ELECTRONICS

Replace the 14.500 Mhz mixer crystal with one of 450 or 900 khz higher to move the bands up for the inclusion of the 10 meter novice/tech band. A 640 khz jump similar to the MB8719 PLL pin 10 jump will add frequencies above the given frequencies by powering up the 4008 adder IC#7, pin(3). This enables the addition of 20+ more frequencies without changing crystals.

When ordering crystals, don't forget to add 2 1/2 or 3 khz to allow you to even out the clarifier +/- 5 khz or better. If you take the Uniden crystals at face value (15.000 mhz) and add 450 or 900 khz, you will not be able to center the clarifier since the 15.000 mhz crystal Uniden supplies is really 15.0025 mhz.

15.0025 mhz will give you 26.515-28.755.

15.4525 mhz will give you 26.965-29.205.

INCREASED POWER OUT FOR THE JACKSON

• Swede, Echibon Communications

Mod done on Blank Face Jackson, PB-042AB, with HI/LO Pwr mod, 5kc drop & Extended frequency range.

You will need an MRF497 and an ECG-340 before attempting mod.

(1) Replace the MRF477 with the MRF497. The 497 has a higher wattage rating (40watts RMS on the frequencies we are interested in) than the 477. The MRF497 itself doesn't give a power gain, but it runs cooler than the 477.

Test were done on 27.195 into a dummy load using USB w/ a 1000hz tone.

(2) After installing the MRF497, perform a trans alignment. Include the ALC and adjust to maximum. Set bias as outlined in alignment procedures. Adjust L43, L41, L42, L33 & L30, in that order. Power out on USB was 32 watts.

(3) Looking down past the driver, we find TR-38 (RF Pre driver a 2SC2086. Remove it and replace with an ECG-340.

RCI-2900 ALIGNMENT PROCEDURE

NOTE; the pinouts are exactly opposite-EBC vs CBE.

Of course to make things easy, the tranny is under the RF Shield. Nobody said this was a get rich quick business.

The results after re-alignment was 42 actual watts! (Measurement was taken on a REAL watt meter). Admittedly not spectacular. Other chassis might produce better results.

The main value here is that after three minutes of solid dead key at 42 watts, the heat sink could still be touched. Not tested, but imagine how nice it would be if 15W AM/FM could be run for long periods without damage to the final!

WARNING!!! Do not try to drive an amp with this radio after doing the mod.(Or before for that matter!)

Presently, prices are running around \$28.00 for the set.(Including shipping)

RCI-2900 ALIGNMENT PROCEDURE

● BILL GRASSA

PLL Adjustment

(1) Turn CLARIFIER in the middle position.

(2) Put test probe of counter on TP4, unit in 28.0000MHz (RX mode)

In AM, adjust L21 to read frequency 17.205MHz +/- 50Hz

In USB, adjust L22 to read frequency 17.3075MHz +/- 50Hz

In LSB, adjust L23 to read frequency 17.3025MHz +/- 50Hz

(3) Put test probe of multimeter on TP6, unit in TX mode

In AM, adjust L27 to read 10.695MHz +/- 30MHz

In USB, adjust L28 to read 10.6925MHz +/- 30MHz

In LSB, adjust L29 to read 10.6975MHz +/- 30MHz

(4) Put test probe of multimeter on TP7, unit in 28.0000MHz (RX mode)

In AM, adjust L17 to read DC 0.85V

(5) Put test probe of oscilloscope on TP5, unit in 28.0000MHz (RX mode)

In AM, adjust L18 to maximum output

(6) Unit in USB TX mode (MOD off)

Put current meter in TP3 and TP2 adjust VR11 to read 20mA on current meter

Put current meter in TP3 and TP1, first minimize with VR9 then adjust

VR10 to read 50mA and adjust VR9 to read 100mA