the junction of C70 and C69.
2. Loosen the cores of the coils with acetone, and allow at least half an hour for them to dry out.
3. Adjust as in **Table 3** with KW2000 in receive mode. Fig. 4 shows the coil locations.

Carrier balance adjustment

Connect KW2000 to a dummy load, switch on and allow at least half an hour for warm up. Tune rig to 3.6MHz. Tune up and then switch to LSB and select INT MOX. Set MIC GAIN to minimum. Tune a second receiver to 3.6MHz when a signal should be heard. Reduce the level of this signal to as low a level as possible by adjusting RV14 and C12 in KW2000 for minimum carrier. These two adjustments interact, and so they should be adjusted alternately until no further improvement can be obtained. Having done this, switch to USB and compare the carrier level with that obtained in LSB. It has been found that with some KW2000s a compromise has to be made between the two as regards carrier balance.

S-meter adjustment

KW Electronics state in their handbook that with a signal input of 50mV at 3.6MHz the S-meter should read S9, and with 5mV it should read S9+40dB. To set the meter for these conditions procede as follows:-

1. Set RV102 to the centre of its travel.
2. With no signal input, adjust S-meter to zero using RV101.
3. Inject a 3.6MHz signal at 50uV into the aerial socket, and tune pre-selector for maximum S-meter reading.
4. Adjust RV99 so that the meter reads S9.
5. Increase the input signal to 5mV and adjust RV102 so that the meter reads S9+40dB.
6. Remove input signal and re-adjust meter to zero with RV101.
7. Repeat the above procedure until readings are correct at all three specified levels.

Now that the KW2000 is working correctly it is safe to start carrying out modifications. Next months's article will give details of some of these.

RX ALIGNMENT (RF STAGES)

Table 1

Input frequency	Adjust for max 'S' meter readings
28.1	Adjust L5, L10 (Repeat 2-3 times)
21.1	Adjust L4, L9. *Note:* If L4 has no core. Rock pre-selector back and forth. Peak with L9 ONLY
14.1	Adjust L3 and L8 (Repeat 2-3 times)
7.1	Adjust L2 and L7 (Repeat 2-3 times)
3.6	Adjust L1 and L6 (Repeat 2-3 times)
1.9	Adjust C143 and C43 (Repeat 2-3 times)
NOTE	Always align RF stages **HF** bands first. Never in reverse order!

TX ALIGNMENT

Table 2(a)

Frequency	Adjust for maximum drive	Neutralising adjustment
28.1	L15 Repeat this adjustment if neutralising has been adjusted.	Max output from P/A should be at 'Dip'. If max o/p is obtained with P/A current meter, then reduce valve of C56. If max is on HF side of Dip, increase value of C56 (neutralising capacitor).
21.1	L14 Repeat this adjustment if neutralising has been adjusted.	**Note:** If max o/p from P/A is at 'Dip', if max o/p is LF of Dip. Increase C61. If max o/p is HF of Dip. Decrease C61
14.1	L13 Repeat if neutralising has been adjusted	**Note:** If max o/p from P/A is at 'Dip'. If max o/p is LF of 'Dip' increase C162. If max o/p is HF of 'Dip' decrease C162.

Table 2(b)

Frequency	Adjust for max drive
7.1MHz	Adjust L12
3.6MHz	Adjust L11
1.9	Adjust C47

Table 3

Band	Adjust for max reading on RF mA meter
28.4	L20
21.0	L21
14.0	L22
7.0	C74
3.5	C73
1.8	L25