

MODEL 72**Chasses H-1
H-2****ATWATER KENT MFG. CO.****EQUIPMENT REQUIRED FOR SERVICING TYPE H CHASSIS**

In order to make the correct adjustments of trimmer condensers in Type H chassis, it is necessary to have the following equipment:

1. A four-wave oscillator providing modulated signals at 1,500, 1,000, 800 and 600 kilocycles. The oscillator signals must come in at exactly these settings on a Type H chassis that has been checked on "standard-frequency" broadcast stations to make certain that the dial calibration is accurate. In other words, the set is used as a wavemeter to check the frequency of the oscillator. In turn, the set must be checked frequently against "standard-frequency" broadcast stations.

The oscillator frequencies should be checked at least once a day, and more often if necessary.

Each oscillator in the four-wave oscillator must have an adjustable pick-up. Adjustment of any one pick-up must not affect the frequency of its oscillator, nor should it affect the volume of the other oscillators.

The 1500 K. C. oscillator must have an extra pick-up that may be cut in to provide an extra-strong 1500 K. C. signal, or cut out to provide a normal-strength 1500 K. C. signal. The extra-strong 1500 K. C. signal is used in adjusting the double-spot trimmer.

2. A 130-kilocycle oscillator. This should be tuned to 130 K. C. by adjusting its trimmers to give maximum output when this oscillator is coupled to the I. F. amplifier in a Type H chassis that has the original factory synchronism. The frequency of the 130-K. C. oscillator should be checked frequently.

The 130-K. C. oscillator may be coupled to the Type H chassis in either one of two different methods, as follows: (a) The oscillator may be completely shielded with a shielded lead connecting an adjustable pick-up in the oscillator to the control-grid cap of the 1st-detector. (b) The oscillator may be mounted under the test bench in such a position that it will be close to the 1st-detector plate-circuit choke. A 2-inch hole should be drilled at this point in the metal plate that covers the test bench. In this case, of course, the bottom plate of the set should be removed.

3. An output measuring circuit such as that shown on page 166

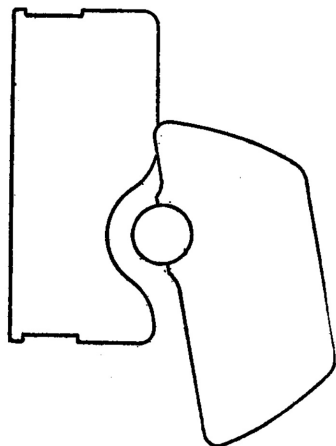
4. Two No. 18261 coil shields with the tops cut off. These are used in place of the regular No. 18261 shields to cover the I. F. transformers in Type H-2 Chassis, in order to make the I. F. trimmer condensers accessible.

5. One No. 17295 coil shield with a half-inch hole cut in the top. This is used in place of the regular No. 17295 shield to cover No. 4 R. F. T., in order to make the double-spot trimmer accessible.

These specially cut shields are NOT supplied from the factory.

6. One No. 15592 (black) tubular resistor with a half-inch length of solid wire soldered to each end. This is used as described on Page 275.

7. A trimmer-condenser screw-driver. This should be made from a fibre rod about 10" long and 1/4" in diameter

INITIAL ADJUSTMENT OF ROTORS AND POINTER TO 1500 KILOCYCLES

POSITION OF ROTOR BLADES
FOR 1500 K. C.

When the variable-condenser unit has been replaced or adjusted in any way, it is necessary to check the alignment as follows:—

Center the pointer on the control arm and tighten the pointer screws.

- (1) Loosen the gear set-screws.
- (2) Move the rotor plates to the position shown
- (3). With the rotor in this position, adjust the control arm to the 1500 K. C. position and tighten the gear set-screws.
- (4) Note how far down on the 1500 K. C. mark the pointer comes, then turn the condenser knob to the 550 K. C. mark. The pointer should come down on this mark approximately the same as on the 1500 K. C. mark. If it does not, it is an indication that the front panel is not centered.
- (5) If the front panel is not centered, loosen the screw at each end of the bottom of the front panel and shift the panel as necessary. Tighten the panel screws and then reset the control arm