

Detrola Radio & Telev. Corp.

Model: 147E

Chassis:

Year: Pre October 1937

Power:

Circuit:

IF:

Tubes:

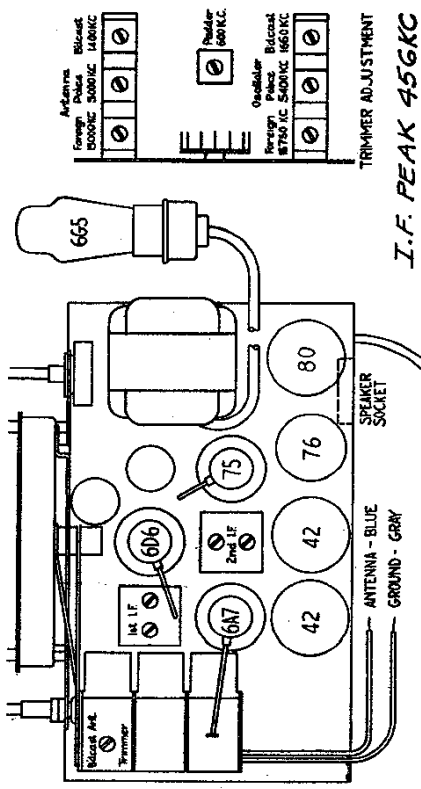
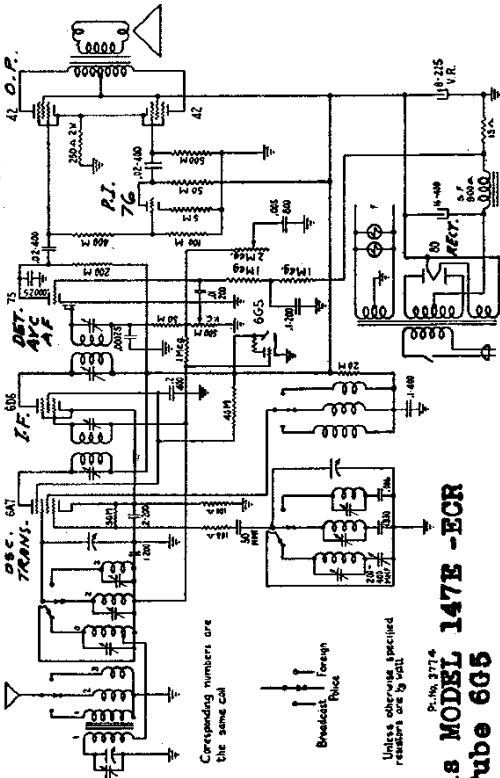
Bands:

Resources

Riders Volume 8 - DETROLA 8-12

DETROLA RADIO CORP.

MODEL S 147, 147E, 147E CR
Schematic, Socket, Parts
Alignment, Trimmers



I.F. PEAK 456KC
MODEL 147-the same as MODEL 147E-ECR
except that Tuning Tube 6G5

I. F. Alignment
The I.F. frequency of this receiver is 456 K.C. For realignment, use the following procedure.

It is necessary to use an accurately calibrated signal generator. Couple the signal generator to the grid of the 6A7 tube with a tenth microfarad condenser in series with the "high" lead of the signal generator. Connect the ground side of the signal generator to the chassis. Set the signal generator to 456 K.C. Be sure the wave switch of the set is in the broadcast position and the volume control set at maximum. Attenuate the signal generator so that the signal is just audible in the speaker. If an output meter is used, it should be connected across the voice coil terminals of the speaker. Use 1/2 volt as standard output.

Adjust the 2nd I.F. transformer first. Each screw should be adjusted for maximum output. After number two I.F. has been adjusted, number one I.F. should be adjusted for maximum output. After both transformers have been adjusted, it is necessary to recheck No. 2 transformer and then recheck No. 1.

See TUBE LAYOUT for location of I.F. and R.F. trimmers and paddler.
R.F. (See above diagram for location of trimmers.) Using 200 mmf condenser in series with the generator, feed 1660 kc to antenna lead and adjust broadcast oscillator trimmer for top frequency. Set generator to 1400 kc, tune receiver and adjust the two antenna trimmers. Set generator to 600 kc, tune receiver to signal and adjust paddler. The tuning condenser should be rocked back and forth through the signal while the paddler is being set in order to secure perfect alignment.

Using 400 ohm resistor in series with generator, set band selector in center position, set generator to 5400 kc and adjust oscillator trimmer for top frequency. Set generator to 5000 kc, tune receiver to signal and adjust antenna trimmer.

Turn band selector to extreme clockwise position. Using 400 ohm resistor in series with generator, set oscillator top frequency for 15,750 kc—screw trimmer down tight, then unscrew to second peak. Set generator to 15,000 kc, tune receiver to signal and adjust antenna trimmer—Screw trimmer down tight, then unscrew to first peak, rocking the tuning condenser back and forth through the signal while the adjustment is being

| Part No. | Req. | Description | Part No. | Req. | Description |
|----------|------|-------------------------------|----------|------|---------------------------|
| 2163 | 1 | Cable, Drive, Approx. 20" | 3353 | 1 | Resistor, 2 W., 250 Ohm |
| 3351 | 1 | Cond. 8 MF. 225 V. Reg. | 2689 | 2 | Resistor, 1/3 W., 100 Ohm |
| 3774 | | Wet El. | 2883 | 1 | Resistor, 1/3 W., 5 M. |
| 3775 | | Schematic Diagram | 2882 | 1 | Resistor, 1/3 W., 15 Ohm |
| 2560 | 1 | Tube Sticker | 2881 | 1 | Resistor, 1/3 W., 400 M. |
| 2597 | 4 | Condenser, Padder | 2880 | 1 | Resistor, 1/3 W., 100 M. |
| 1611 | 1 | Condenser, Trimmer, 1-10 | 636 | | Resistor, 1/3 W., 40 M. |
| 3157 | 1 | Condenser, Trimmer, 5-35 | 2724 | | Switch, Band |
| 1286 | 1 | Condenser, Trimmer | 2837 | 1 | Coil, Antenna |
| 2780 | 1 | Condenser, Mica, .00025 | 2772 | 1 | Coil, Oscillator |
| 2741 | 1 | Condenser, Mica, .00005 | 2845 | 1 | Coil, B. C. Antenna |
| 2872 | 1 | Variable Condenser | 3343 | 1 | Transformer, Power |
| 576 | 2 | Condenser, .02, 400 V., Paper | 3344 | 1 | Transformer, 1st I. F. |
| 572 | 2 | Condenser, .1, 200 V., Paper | 3375 | 1 | Transformer, 2nd I. F. |
| 565 | 1 | Condenser, .01, 200 V., Paper | 2908 | 1 | Cond. Elec. 16 MF., 400 V |
| 581 | 1 | Cond., .005, 600 V., Paper | 3374 | 1 | Indicator |
| 2792 | 1 | Condenser, .2, 200 V., Paper | 3378 | 1 | Pointer |
| 2793 | 1 | 1 Cond., .006, 600 V., Paper | 2726 | 1 | Control, Vol. & Switch |
| 3352 | 1 | Condenser, .2, 400 V., Paper | 2737 | 1 | Control, Tone |
| 575 | 1 | Condenser, .1, 400 V., Paper | 1732 | 1 | A. C. Cord |
| 624 | 2 | Resistor, 1/3 W., 1 Meg. | 3778 | 1 | Book, Instruction |
| 2731 | 1 | Resistor, 1/3 W., 500 M. | 2897 | 1 | Escutcheon Tuning Tube |
| 2730 | 1 | Resistor, 1/3 W., 200 M. | 2981 | 1 | Tuning Tube Cable |
| 631 | 2 | Resistor, 1/3 W., 50 M. | 3710 | 1 | Speaker, 8" |
| 617 | 1 | Resistor, 1/3 W., 20 M. | 3377 | 1 | Escutcheon |

made. Above procedure for alignment at 15,000 kc must be followed exactly to insure proper tracking. A dead spot at about 12,000 kc will result if antenna and oscillator circuits are not set in proper relation to each other.