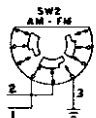


Some chassis used in later production of the subject models are designated V-2136-1A. These chassis are the same as the V-2136-1 except for the differences mentioned in the following paragraphs. These chassis use a 19T8 tube in place of the 12AL5 and 12AV6 tubes used in the V-2136-1 chassis. Tap 1 of ratio detector transformer T3, that was connected to pin 1 of the 12AL5, is now connected to pin 3 of the 19T8; and tap 4 of T3 is connected to pin 1 of the 19T8. A 33,000-ohm resistor R35 (R5, 22,000 ohms which was in this position has been removed), is connected from pin 2 to pin 7 of the i-f detector 19T8. C30 is connected across R35, and the two 100,000-ohm resistors used for alignment purposes only are still connected to the junction of C30 and R35. R24, the 220,000-ohm resistor that was connected to C30 and the junction of R25 (4.7 megohms) and R2 (470,000 ohms), and the lead from R24 to SW2 have been deleted. Pin 6 of the 19T8 is connected to tap 1 of T6, the 2nd i-f-a-m transformer. Pin 7 is grounded; pin 9 goes to the junction of R31 and C19C and D; and pin 8 goes to the junction of R10 and C19A. R25, that was connected from R3 to the junction pin 6 of the 12AV6 and R24 and R2, has been deleted. R2, 470,000 ohms, is now connected from ground to the junction of R19 (the 2.2-megohm resistor going to tap 4 of 1st i-f-a-m transformer) and R6 (the 47,000-ohm resistor going to tap 2 of T6). C13, the 0.05- $\mu$ f capacitor that went from terminal lug 4 of the antenna terminal board, is now located from tap 4 of T5 to ground, in place of C16, the 0.01- $\mu$ f capacitor which has been removed. The positions of C31 and C19B have been reversed. Capacitor C31, 150- $\mu$ f, is now located from ground to tap 2 of T6; and capacitor C19B, 220  $\mu$ f, is now located from ground to the junction of R2, R6, and R19. A 470,000-ohm resistor R33 (Part No. RC20-AE484K) and a 100- $\mu$ f capacitor C43 (Part No. RCM20B101K) have been added in parallel from tap 3 of T2 to ground.

The accompanying diagram shows switch SW2. Only the middle wafer contains changes that have been made in the V-2136-1A chassis.



Switch SW2 used in Chassis V-2136-1A.

The first and last wafers are wired as shown in the schematic for V-2136-1. (The numbers in the illustration were added for reference only.) Contact 1 goes directly to B and A of C33, and thence to L10. Contact 2 goes directly to R20, 47 ohms, and thence to pin 7 of 12BE6. The 47,000-ohm resistor R26 and the 0.001- $\mu$ f capacitor C2 connected to R20 have been deleted from the circuit, and contact 3 is grounded.

In the 50L6/GT output circuit capacitor C4, 0.005  $\mu$ f, is connected to pin 8 rather than to pin 4. The 3.3-megohm resistor R27, that is connected from terminal lug 4 to SW2 in the V-2136-1 chassis, has been deleted in the V-2136-1A chassis.

**Zenith H615, H615W, H615Y, Ch. 6G05**

These models and chassis are the same as Model G615, Chassis 6G05, except for the differences in their cabinets. Model H615 has a plastic cabinet (part number 14-1274). Model H615W has a white plastic cabinet (part number 14-1275); and Model H615Y has a black plastic cabinet (part number 14-1276).

**Zenith 6MF780, Ch. 6D80, Ford; 6MF780E, Ch. 6D80E, Ford; 6MM790, Ch. 6D90, Mercury; 6MM790E, Ch. 6D90E, Mercury**

Model 6MM790, Mercury, is erroneously listed in the Indexes and in Volume XVIII as Model 6MN790.

Mercury Model 6MM790E is the export model of the 6MM790. Model 6MF780E, Ford, is the export model of the 6MF780. In these export models the circuit breaker capacitor 22-1148 should be installed as shown in Fig. 1.

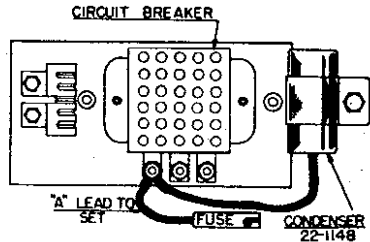


Fig. 1. Circuit breaker used on Mercury Model 6MM790E.

Top and bottom views for Chassis 6D80, 6D80E, 6D90, and 6D90E, are shown in Figs. 2 and 3. The i-f alignment procedure for these chassis is as follows:

1. Remove top and bottom covers from receiver.
2. Set signal generator to 265 kc.
3. Apply signal from generator through a 0.1- $\mu$ f dummy to the 7B8 converter grid. (Pin 6 on the socket.)
4. Adjust the i-f trimmers, A, B, C, and D (shown in Fig. 2) in the order named for maximum output. Repeat the operation to assure accurate alignment.

The r-f and oscillator alignment is as follows:

1. Connect signal generator leads through dummy antenna lead in socket on receiver.
2. Set the signal generator to 535 kc.
3. Place set in manual tuning position and set dial to 535 kc.
4. Adjust oscillator trimmer C-9 (shown in Fig. 3) for maximum response.
5. Set signal generator to 1200 kc.
6. Tune set to 1200 kc.
7. Adjust converter trimmer C-7 and antenna trimmer C-2 for maximum response.
8. If dial calibration is off after making above adjustments, a correction can be made by loosening dial scale mounting screws and sliding scale to desired position.

When replacing the core or coil the following adjustments should be made:

1. Replace coil or core.
2. Set signal generator to 1700 kc.
3. Connect signal generator leads through dummy antenna to antenna receptacle on the receiver.
4. Set receiver dial to 1600 kc (maximum high-frequency end of dial).
5. Screw the core completely out of the antenna coil, the converter coil, and the oscillator coil.
6. Adjust oscillator trimmer C-9 at 1700 kc.
7. Adjust converter trimmer C-7, and antenna trimmer C-2 for maximum output reading.
8. Replace cores to their approximate original position.
9. Set signal generator dial and receiver dial to 1200 kc.
10. Adjust oscillator core L-5 to scale at 1200 kc.
11. Adjust the antenna core L-2 and converter core L-3 for maximum output reading.

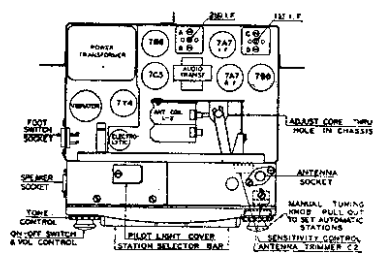


Fig. 2. Top view of Chassis 6D80, 6D80E, 6D90, and 6D90E.

12. Set signal generator to 600 kc.
13. "Rock in" shunt oscillator coil L-6 for maximum output reading. This should be done only as a last resort. This is the same as rocking in the padder capacitor on a ganged capacitor receiver.
14. Check receiver at 1200 kc for calibration and gain. If the receiver is off scale or weak, repeat operations 9, 10, and 11.

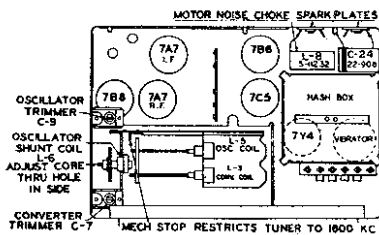


Fig. 2. Bottom view of Chassis 6D80, 6D80E, 6D90, and 6D90E.

15. After alignment is complete, the maximum high-frequency tuning range should be checked. If the range is greater or less than 1605 kc, the mechanical stop for the tuner cross arm should be bent to limit the frequency coverage to 1605 kc. After all adjustments have been made, glue core screws with speaker cement.