General Information:
All Packard-Bell Television Receivers produced up to and including May 1st, 1948, employ one of three types of R-F Tuners. These are, according to their Packard-Bell Part No., Nos. 1620, 1628 & 1627. Service information such as, Alignment Procedure, Schematic Diagram, etc., covering the 1620 and 1628 will be found in the Service Instructions for Model 3214. However, in subsequent models to the 3214TV, the 1627 R-F Tuner is also used. Since no service data has been published concerning this unit this supplement sheet is being issued containing the following information:

1. ALIGNMENT PROCEDURE
(a) Trimmer Location
(b) Alignment Chart

2. SCHEMATIC DIAGRAM

For identification purposes, list below are the distinct features of each tuner:

1620 — Wafer Switch Type
1628 — Capacitor Inductance Type
1627 — Turret Type

In early production runs the tuner unit was installed in the main chassis with the AGC in the circuit. However, more recently the AGC lead is grounded. The AGC lead is colored green with a white tracer.

ALIGNMENT PROCEDURE

The alignment procedure as herein outlined is that of the R-F Tuner only. For complete alignment instructions, refer to the Service Instructions for whatever model is being serviced.

Trimmers 15, 16, 17 & 18 are pre-adjusted at the factory. Experience has proven that to hold adjustments should be necessary in their case. However, should the occasion demand, the following is the correct procedure for adjusting them:

R-F and Mixer Adjustments:
1. Set the Station Selector Switch to Channel 12.
2. Connect oscilloscope to oscilloscope test point (See Figure 1, Trimmer Locations).
3. Set bias to 1.5 volts.** Det Fine Tuning Control at approximate mid-point of its tuning range.
4. Feed sweep generator into antenna terminals, sweeping channel 12.
5. Adjust S-16, S-17 & S-18 for flat top response curve. Check vacmers on all channels; they should fall in automatically on all channels.

**NOTE: This step may be accomplished by shorting the AGC lead from grounding (if grounded) and connecting a 1.5 volt supply. (1.5 volt battery may be used.)

S-1 — I-F Adjustment, 21.25 MC (Sound)
S-2 — Oscillator Adjustment, Channel 2
S-3 — " " " " Channel 3
S-4 — " " " " Channel 4
S-5 — " " " " Channel 5
S-6 — " " " " Channel 6
S-7 — " " " " Channel 7
S-8 — " " " " Channel 8
S-9 — " " " " Channel 9
S-10 — " " " " Channel 10
S-11 — " " " " Channel 11
S-12 — " " " " Channel 12
S-13 — " " " " Channel 13
S-14 — I-F Adjustment, 21.8 MC (Picture)
S-15 — Oscillator Adjustment (C-11 on Schematic Diagram)
S-16 — Mixer Adjustment (C-10 on Schematic Diagram)
S-17 — R-F Adjustments (C-8 on Schematic Diagram)
S-18 — Antenna Adjustment (C-1 on Schematic Diagram)

Oscillator Alignment:
1. Turn Selector Switch to channel 12.
2. Connect signal generator (modulated) to one antenna terminal and ground.
3. Connect vacuum tube voltmeter to audio output on main chassis.
4. Adjust S-16 for zero reading on VTVM between a positive and negative peak.

I-F and Trap Alignment:
1. Connect vacuum tube voltmeter in series with a 10,000 ohm resistor to 2nd detector video output on main chassis.
2. Remove tube shield from 6J6 on tuner.
4. Set frequency of signal generator to 21.25 MC and tune S-1 for minimum voltage on VTVM.
5. Set frequency on signal generator to 21.8 MC and tune S-14 for maximum voltage on VTVM.

**NOTE: Use high output signal generator at 21.25 MC and low output at 21.8 MC.

**Figure 1 — TRIMMER LOCATION**

**Figure 2 — SCHEMATIC DIAGRAM**