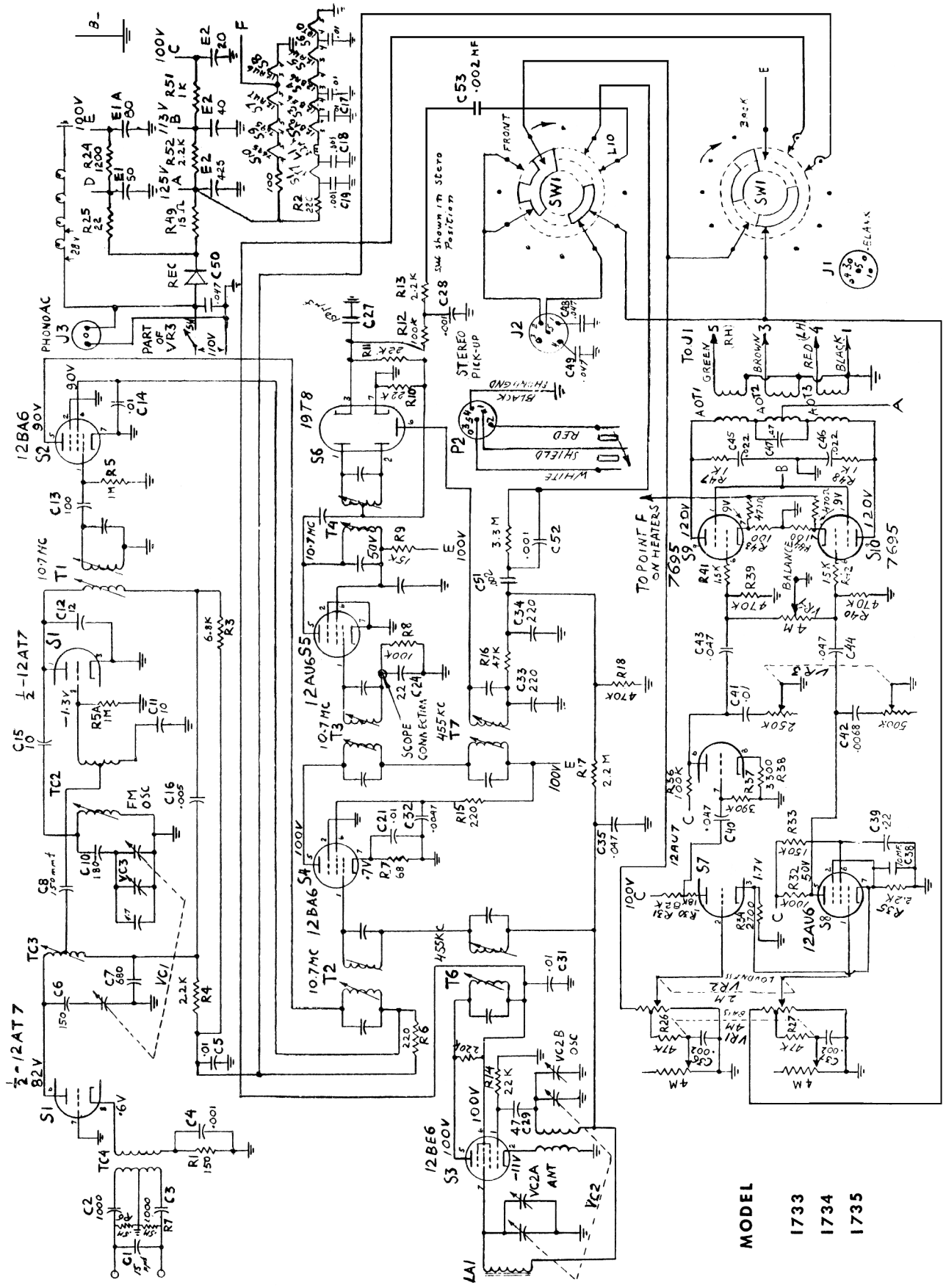
MODEL
1733
1734
1735

ALIGNMENT PROCEDURE

To align without Reverb. unit connected, a jumper plug must be used to connect Power (110 V - 60 Cycle) from Socket marked Reverb. Power on Radio Chassis to plug marked Radio Power on same chassis.

AM ALIGNMENT PROCEDURE

RADIO CONTROLS - Set the loudness control to maximum, set the function switch to AM and the tuning gang closed.
OUTPUT INDICATOR - Connect either an a-c voltmeter or an oscilloscope across the voice coil terminals.
SIGNAL GENERATOR - Use an AM r-f signal generator with modulated output.
OUTPUT LEVEL - During alignment, maintain the output below .4 volts a-c.

CAUTION - To avoid shock hazard, the receiver should be connected to the a-c line through an isolation transformer.

1. Connect generator, through a .05 mfd condenser, to grid, pin 7, of the AM convertor, S-3. Connect ground lead to chassis.
2. Set generator to 455 kc, tuning gang fully closed and adjust, in order T6, T7 Top and Bot cores for maximum output. Repeat until no further gain is indicated.
3. Connect generator to radiating loop. Set generator to 1600 kc. Set receiver to 1600 kc as indicated by pointer. Adjust VC-2B for maximum.
4. Set generator to 1400 kc. Tune receiver to signal and adjust VC-2A for maximum.

FM ALIGNMENT PROCEDURE

AM Broadcast Section should be aligned first

1. Calibrate the scope for 2 volts P/P.
2. Connect the scope, through a 100,000 ohm isolating resistor, to junction of R8 and C24. Scope ground lead to chassis. (see schematic)
3. Connect the signal generator to bottom of T1 secondary (junction of T1 with R1 and C5). Generator ground lead to chassis.
4. Inject marker signal, 10.7 mc (unmodulated).
5. Inject sweep signal, 1.7 mc, approximately 150 kc total deviation (do not over sweep).
6. Adjust Top and Bottom cores T3, T2 and T1 for maximum amplitude, symmetrical curve with the 10.7 mc marker at top of curve.
   Adjust input signal to maintain output, as shown on scope below 2 volts peak during alignment.
   Repeat step 6 until no further gain is obtained.
7. Calibrate the scope for 5 volts P/P.
8. Change the scope connections to L10 (FM audio output to function switch).
9. Remove sweep signal. Inject 10.7 mc, 30% AM modulated signal. Adjust Bottom core T4 for minimum indication between peaks. See note below.
10. Inject 10.7 mc sweep signal and adjust Top core T4 for maximum symmetrical output.
11. Touch up cores as in Step 6 plus Top core T4 for a symmetrical, maxiumum amplitude, discriminator curve. To check alignment, discriminator curve should not shift in frequency with an increase in signal input (below overload). If a shaft does occur, the I-F is not properly aligned, particularly the first stage, T1.
12. Inject 108.5 mc, 30% AM modulated signal, through an antenna matching network to the receiver antenna terminals.
13. Open tuning condenser. Insert a 6 mil, non-metallic, shim between stator and rotor of the FM gang and close gang against shim.
    Adjust VC3 for minimum indicating between peaks.
14. With tuning condenser fully closed, inject 87.75 mc, 30% AM modulated signal, and adjust TC2 for minimum indication between peaks. See note below.
15. Inject 91 mc, sweep signal and with tuning gang tuned to 91 mc, adjust TC3 for maximum output. See not below.

NOTE: Signal input must be as low as possible in order to obtain a sharp indication. In some cases it may be necessary to set signal generator to the first subharmonic.

RECORD CHANGER - Garrard Model 209.