

PHILCO AUTO RADIO

Procedure for Aligning the Inductive Tuning Units for Chrysler Models C1808 and C1908, Ford Models F1840 and F1841, and Studebaker Models S1824 and S1924

The following is the procedure for aligning the above tuning units after a coil or core has been replaced. The unit should be aligned after it is installed in the Radio.

I. Complete alignment.

- a. Turn the control knob clockwise as far as it will go.
- b. Adjust antenna and oscillator cores according to dimensions given in Figures 1, 2 and 3.
- c. Set up the signal generator, connecting the lead through the proper dummy to the antenna connection. Tune the signal generator to the Radio. The signal should come in between 1570 and 1615 K.C.
- d. Adjust the antenna padder to this signal.
- e. Set the signal generator to 900 K.C. and tune the Radio to receive maximum signal at 900 K.C. Adjust the antenna core for maximum signal at 900 K.C.
- f. Set the signal generator to 1400 K.C. and tune the Radio to 1400 K.C. on the dial. Adjust the antenna padder for maximum signal.
- g. Repeat e and f until there is no improvement.
- h. Set the signal generator to 580 K.C. and tune the Radio to 580 K.C. Adjust the oscillator tracking coil core for maximum signal. "Rock" the tuning control while making this adjustment. Tune the control to the signal and adjust the oscillator tracking coil core for maximum signal. Rotate the tuning control back and forth slightly until maximum signal is obtained. Then readjust the oscillator tracking coil core for maximum signal. Repeat this procedure until no further improvement is noticed.
- i. In case a great adjustment was necessary in h, the adjustment of e, f and h should be repeated. The unit should then be perfectly aligned at 1400 K.C., 900 K.C. and 580 K.C.

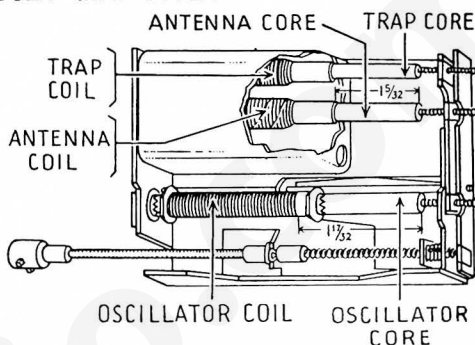


FIGURE 1 — Inductive Tuning Unit for Models C1808, C1908

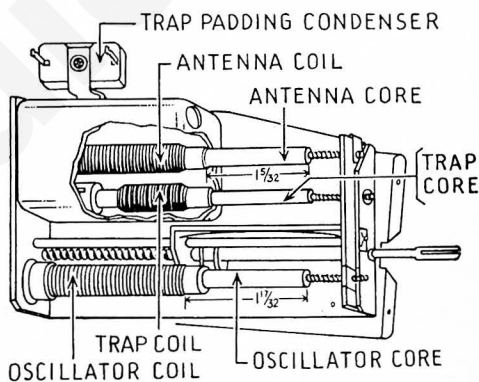


FIGURE 2 — Inductive Tuning Unit for Models F1840, F1841

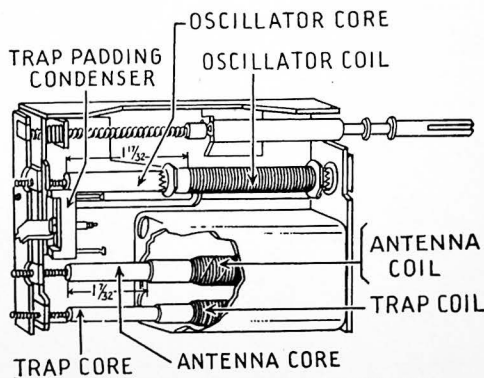


FIGURE 3 — Inductive Tuning Unit for Models S1824, S1924

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- j. Set the signal generator to 550 K.C. and tune the Radio for maximum signal.
 - k. Peak the generator to image frequency of 550 K.C. (1460 K.C.).
 - l. Adjust the trap core for minimum signal as in 1 or 2 below.
 1. If the unit uses a fixed trap condenser adjust the core.
 2. If the unit uses a padder trap condenser set the core so that the screw end of the core is $11/32$ " from the bakelite cross head and adjust the padder for minimum signal.
 - m. Repeat steps e, f and h described above since the wave trap adjustments will affect the alignment at 580, 900 and 1400 K.C.
 - n. Set the signal generator at 900 K.C. and tune the Radio for maximum signal. Slide the pointer to the 900 K.C. mark on the dial scale.
- 2. Alignment when only antenna coil or core is replaced.**
- a. Turn the tuning control knob clockwise as far as it will go.
 - b. Adjust the antenna core according to dimensions given in Figures 1, 2 and 3.
 - c. Tune the signal generator to the Radio and adjust the antenna padder to this signal.
- d. Set the signal generator to 900 K.C. and tune the Radio to this signal. Adjust the antenna core for maximum output.
 - e. Set the signal generator and Radio to 1400 K.C. and adjust the antenna padder for maximum output.
 - f. Repeat d and e until no further improvement is noticed.
 - g. Check and adjust the oscillator tracking coil core at 580 K.C. if necessary.
- 3. Alignment when only oscillator tracking coil or core has been replaced.**
- a. Set the signal generator and Radio to 580 K.C. Adjust the oscillator tracking coil core for maximum signal by the "rocking in" process as described in 1h.
 - b. Check and adjust the antenna padder at 1400 K.C.
 - c. Repeat step a if necessary.
- 4. Alignment when trap coil or core has been replaced.**
- a. Follow instructions in 1j, k, l, m.
- 5. Proceed as in 1 above when parts in more than one circuit are replaced and when oscillator coil or core is replaced.**
- Note** — When cores are moved in aligning the Receiver or replacing parts, it will be necessary to reseal the core screws to the retaining nuts. Use Philco cement, Part No. 45-2623, for this purpose.

See Page 200 for Replacement Parts

PHILCO AUTO RADIO

DESCRIPTION	MODEL C-1808	MODEL C-1808*	MODEL C-1908	MODEL F-1840	MODEL F-1841	MODEL S-1824	MODEL S-1924
Complete Inductive Unit	77-0666	77-0962	77-0962	77-0701	77-0701	77-0709	77-0709
Antenna Coil	65-0380	65-0449	65-0449	65-0394	65-0394	65-0407	65-0407
Oscillator Coil	65-0439	65-0439	65-0439	65-0392	65-0392	65-0405	65-0405
Trap Coil	65-0382	65-0382	65-0382	65-0393	65-0393	65-0406	65-0406
Antenna Core	57-1702	57-1702	57-1702	57-1702	57-1702	57-1702	57-1702
Oscillator Core	57-1703	57-1703	57-1703	57-1703	57-1703	57-1703	57-1703
Trap Core	77-0677	77-0677	77-0677	77-0677	77-0677	77-0677	77-0677
Trap Padder	Not Used	Not Used	Not Used	63-0071	63-0071	63-0071	63-0071
Tuning Shaft	77-0767	77-0767	77-0767	77-0766	77-0766	77-0715	77-0715
Oscillator Coil Retaining Spring	57-1673	57-1673	57-1673	57-1673	57-1673	57-1673	57-1673
Antenna Coil Retaining Spring	57-1398	57-1398	57-1398	57-1398	57-1398	57-1398	57-1398
Hairpin (Shaft Retaining)	57-1868	57-1868	57-1868	Not Used	Not Used	57-1868	57-1868
Speed Nut (Shaft Retaining)	57-1329	57-1329	57-1329	57-1329	57-1329	57-1329	57-1329
"C" Washer (Shaft Retaining)	Not Used	Not Used	Not Used	28-2043	28-2043	Not Used	Not Used

* Latest Production