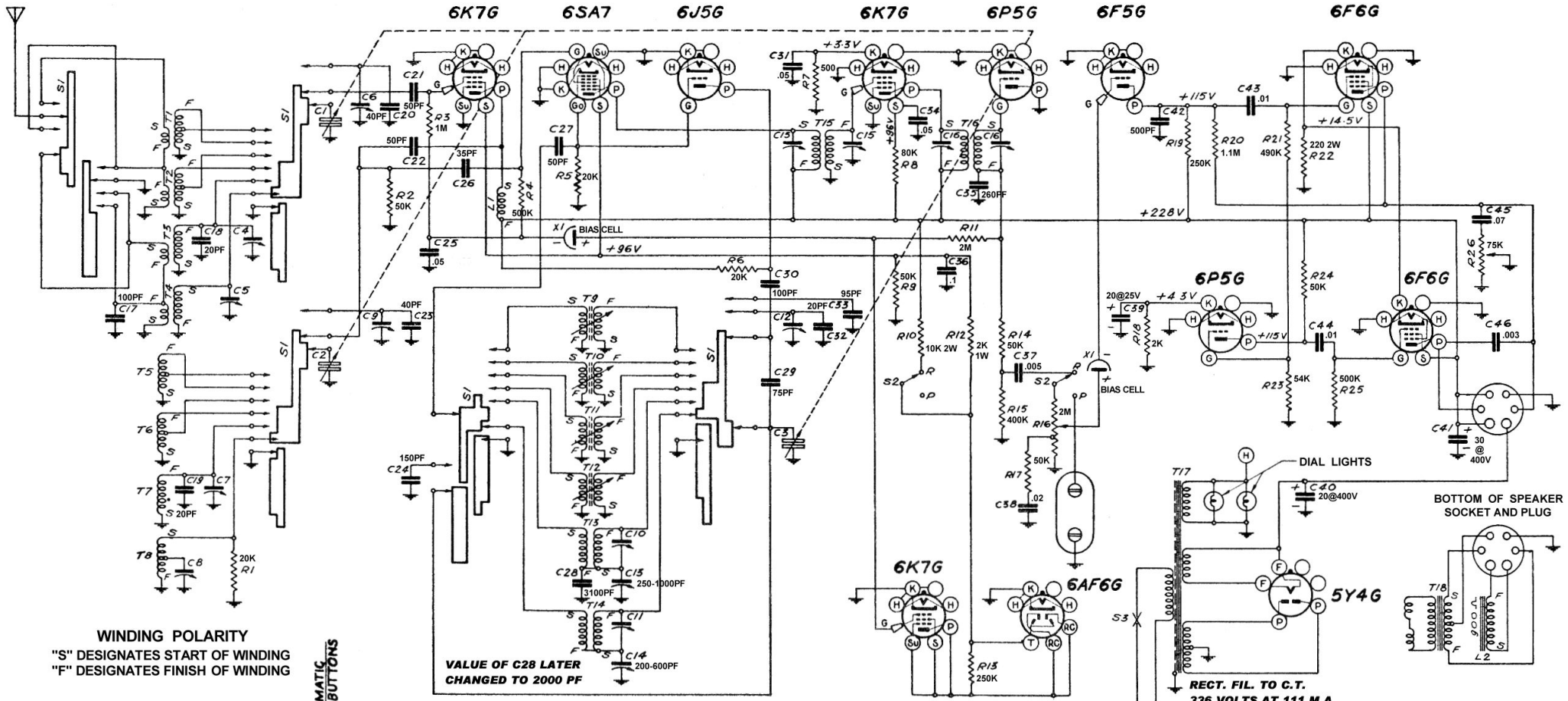


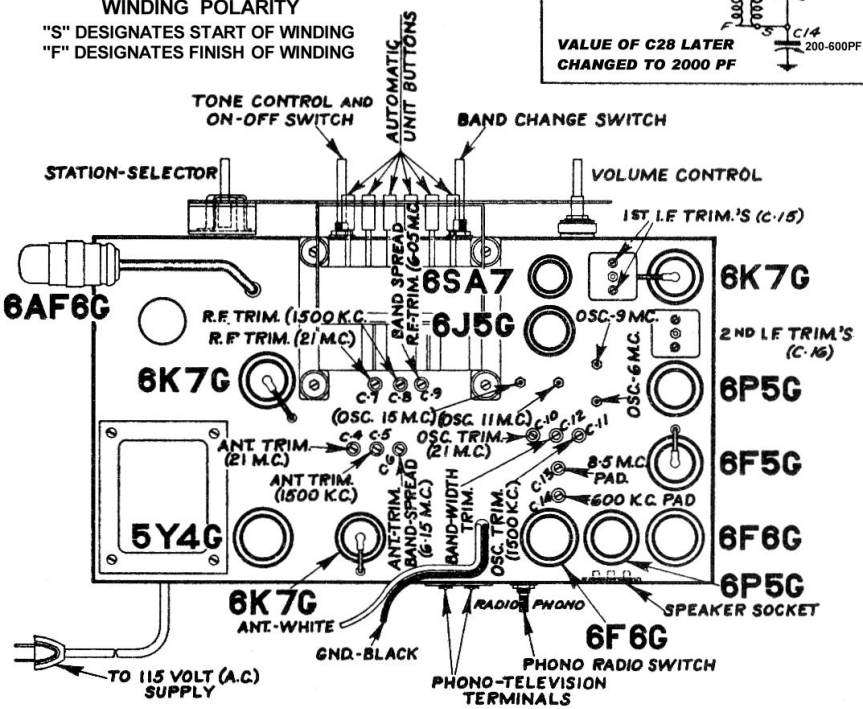


# Phonola - Electrohome

## 93A126-P

## Z93A126-L

## ALIGNMENT — PROCEED IN SEQUENCE LISTED

| | Band Switch Setting | Dummy Antenna | Connect Generator To | Radio Dial Setting | Generator Frequency | Trimmer Adjusted | Adjustment | Note |
|---|---|---|---|---|---|---|---|---|
| 2nd I.F. | B. C. | .1 Mfd. | Grid of 6K7G I.F. Tube | 1650 K. C. | 455 K. C. | 2nd I. F. C-16 | Maximum Output | |
| 1st I. F. | B. C. | .1 Mfd. | Grid of 6SA7 Convertor | 1650 K. C. | 455 K. C. | 1st I. F. C-15 | Maximum Output | |
| 1460 K. C. | B. C. | 200 Mmfd. | Antenna | 1460 K. C. | 1460 K. C. | B.C. Osc. C-11<br>B.C. Int. C-8<br>B.C. Ant. C-5 | Maximum Output | |
| 600 K. C. | B. C. | 200 Mmfd. | Antenna | 600 K. C. | 600 K. C. | B.C. Padder C-14 | Maximum Output | Rock Rotor Back & Forth |
| 21 M. C. | S. W. | 400 Ohm | Antenna | 21 M. C. | 21 M. C. | S.W. Osc. C-10<br>S.W. Int. C-7<br>S.W. Ant. C-4 | Maximum Output | See Para. on 8-22 M.C. Band |
| 8.5 M. C. | S. W. | 400 Ohm | Antenna | 8.5 M. C. | 8.5 M. C. | S. W. Padder C-13 | Maximum Output | See Para. on 8-22 M.C. Band |
| 49 Mtrs. | 49 Mtrs. | 400 Ohm | Antenna | 6.10 M. C. | 6.10 M. C. | Osc. B.S. C-12<br>Osc. Iron Core T-12 | Maximum Output | See Para. on 49 Meter Band |
| 49 Mtrs. | 49 Mtrs. | 400 Ohm | Antenna | 6.05 M. C. | 6.05 M. C. | Int. B.S. C-9 | Maximum Output | See Para. on 49 Meter Band |
| 49 Mtrs. | 49 Mtrs. | 400 Ohm | Antenna | 6.15 M. C. | 6.15 M. C. | B.S. Ant. C-6 | Maximum Output | See Para. on 49 Meter Band |
| 49 Mtrs. | 49 Mtrs. | 400 Ohm | Antenna | 5.95 M. C. | 5.95 M. C. | | | Check Only |
| 49 Mtrs. | 49 Mtrs. | 400 Ohm | Antenna | 6.25 M. C. | 6.25 M. C. | | | Check Only |
| 31 Mtrs. | 31 Mtrs. | 400 Ohm | Antenna | 9.55 M. C. | 9.55 M. C. | Osc. Iron Core T-11 | Maximum Output | See Para. on 31 Meter Band |
| 25 Mtrs. | 25 Mtrs. | 400 Ohm | Antenna | 11.8 M. C. | 11.8 M. C. | Osc. Iron Core T-10 | Maximum Output | See Para. on 25 Meter Band |
| 19 Mtrs. | 19 Mtrs. | 400 Ohm | Antenna | 15.3 M. C. | 15.3 M. C. | Osc. Iron Core T-9 | Maximum Output | See Para. on 19 Meter Band |



# ALIGNMENT AND CALIBRATION

These receivers are carefully aligned and calibrated at the factory, with precision instruments. If realignment is necessary the following equipment is required:

(1) A dependable Output Meter.

(2) A signal Generator to supply, with accuracy the following frequencies:

(a) Intermediate Frequency: 455 K.C.

(b) Broadcast Band: 600 K.C., 950 K.C., 1460 K.C.

Read Instructions For Aligning Shortwave Band.

(c) Shortwave Band: 8.5 M.C., 15 M.C., 21 M.C.

(d) 49 Meter Band: 5.95 M.C., 6.05 M.C., 6.10 M.C., 6.15 M.C., 6.25 M.C.

Read Instructions For Aligning The Bandspread Bands.

(e) 31 Meter Band: 9.55 M.C.

(f) 25 Meter Band: 11.8 M.C.

(g) 19 Meter Band: 15.3 M.C.

### BROADCAST AND 8 TO 22 M.C. SHORTWAVE BAND

The Broadcast Band is aligned in the usual manner. (See alignment chart and tube layout). When aligning the 8 to 22 M.C. Band, observe the following precautions:

When aligning the oscillator at 21 M.C., care should be taken to adjust the oscillator trimmer (C-12) to the peak which will occur at the lowest capacity, and when aligning the antenna and interstage trimmers (C-4 and C-7 respectively), at 21 M.C., rock the gang condenser back and forth to obtain maximum sensitivity.

### THE BANDSPREAD BANDS

These circuits have stabilized adjustments, that have been accurately set at the factory. UNLESS TAMPERING IS EVIDENT, IT IS STRONGLY RECOMMENDED THAT RE-ADJUSTMENT BE AVOIDED." However, if alignment is absolutely necessary the following instructions must be very carefully followed: Special care is to be taken to assure accuracy of the Signal Generator frequencies used. The best method is to check with broadcasting stations of known frequencies.

### 49 METER BANDSPREAD

**6 MEGACYCLE BAND:**

Turn the antenna and interstage bandspread trimmers (C-6 and C-9 respectively), out one half turn from the tight position, for approximate alignment. Set the 6 M.C. oscillator iron core adjustment (T-12), to the central position. (Eleven turns down from full out). Set the Signal Generator to 6.10 M.C. then set the dial pointer to 6.10 M.C. and adjust the oscillator bandspread trimmer (C-12), (See alignment chart and tube layout), to receive the signal; two peaks may be found, if so align to the tightest position (clockwise), check the band frequency width and if necessary re-adjust the oscillator band with trimmer (C-12), (See alignment chart and tube layout). If re-adjustment of C-12 is necessary as mentioned above, it will be necessary to compensate for shifting of the 6.10 M.C. dial point, by means of the 6 M.C. oscillator iron core adjustment (T-12).

To increase the band width, loosen the band width oscillator trimmer (C-12), (See alignment chart and tube layout).

To decrease the band width, tighten the band width oscillator trimmer (C-12), (See alignment chart and tube layout).

Set the signal generator and dial pointer to 6.05 M.C. and align the bandspread interstage trimmer (C-9), (See alignment chart and tube layout).

Set the signal generator and dial pointer to 6.15 M.C. and align the bandspread antenna trimmer (C-6), (See alignment chart and tube layout).

### 31 METER BANDSPREAD

**9 MEGACYCLE BAND:**

Set the signal generator and dial pointer to 9.55 M.C. and align the 9 M.C. iron core adjustment (T-11), (See ailgnment chart and tube layout)

### 25 METER BANDSPREAD

**11 MEGACYCLE BAND:**

Set the signal generator and dial pointer to 11.8 M.C. and align the 11 M.C. iron core adjustment (T-10), (See alignment chart and tube layout).

### 19 METER BANDSPREAD

**15 MEGACYCLE BAND:**

Set the signal generator and dial pointer to 15.3 M.C. and align the 15 M.C. iron core adjustment (T-9), (See alignment chart and tube layout).

Re-check the 6.10 M.C., 9.55 M.C., 11.8 M.C. and 15.3 M.C. dial positions and make any necessary changes by means of re-adjusting their respective iron cores.