

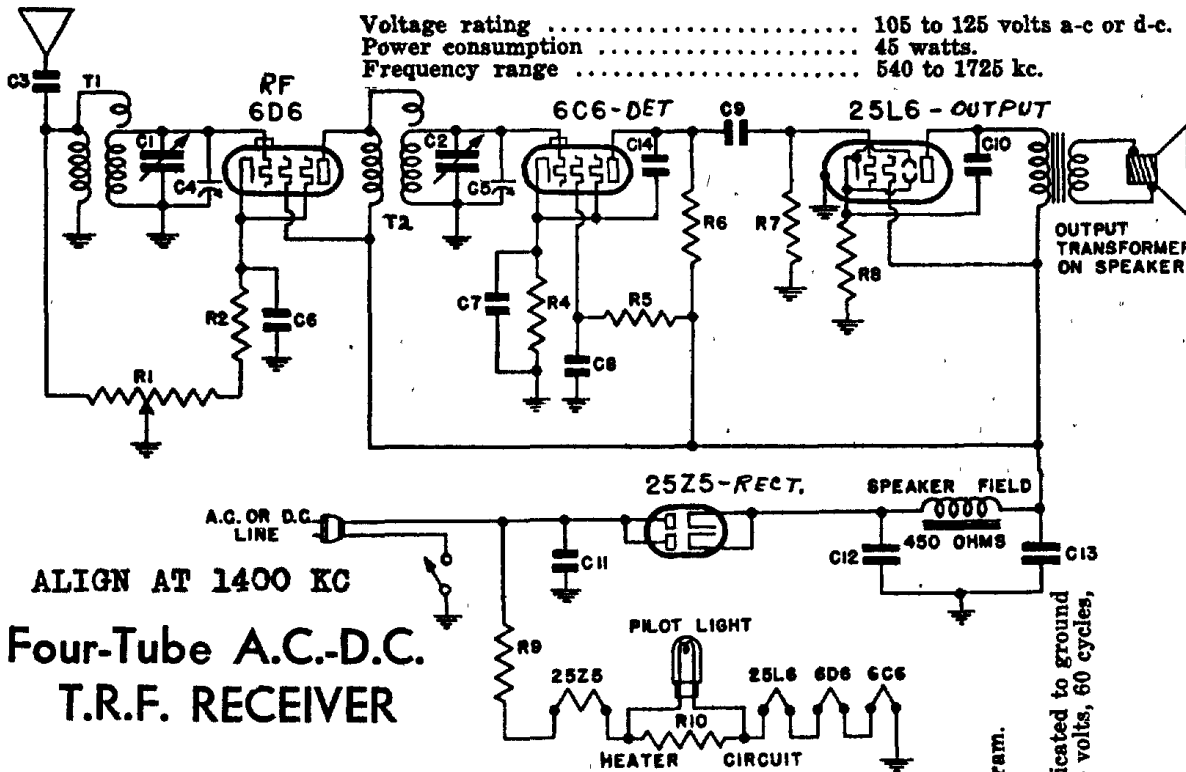
EMERSON RADIO & PHONO. CORP.

MODEL Q157

CHASSIS MODEL Q

MODEL Q157

Voltage rating 105 to 125 volts a-c or d-c.
Power consumption 45 watts.
Frequency range 540 to 1725 kc.



ALIGN AT 1400 KC Four-Tube A.C.-D.C. T.R.F. RECEIVER

PART NO.	DESCRIPTION	PRICE
T1	Broadcast antenna coil	.60
T2	Broadcast detector coil	.55
R1	Volume control—75,000 ohms	1.00
R2	310 ohm 1/2 watt wire-wound molded resistor	.16
R3	250,000 ohm 1/4 watt carbon resistor	.16
R4	2 megohm 1/4 watt carbon resistor	.16
R5	500,000 ohm 1/4 watt carbon resistor	.16
R6	500,000 ohm 1/4 watt carbon resistor	.16
R7	110 ohm 1/2 watt wire-wound resistor	.16
R8	185 ohm 1/2 watt wire-wound resistor	.16
R9	40 ohm metal clad wire-wound resistor	.30
R10	Two gang variable condenser	2.45
C1, C2	0.001 mf roll type condenser	.20
C3	Trimmer part of variable condenser	.20
C4, C5	0.1 mf, 200 volt roll type condenser	.20
C6, C8	0.25 mf, 200 volt roll type condenser	.20
C7	0.02 mf, 400 volt roll type condenser	.20
C9	0.03 mf, 400 volt roll type condenser	.20
C10	0.1 mf, 400 volt roll type condenser	.20
C11	Dual 16 mf, 100 volt dry electrolytic condenser	1.05
C12, C13	0.0001 mf mica condenser	.20
C14	5" dynamic speaker	4.85
†C4, C5	Pilot light, 6.3 volt, 25 amp., Mazda No. 46	1.05
†C6, C8	Line cord with built-in resistor (R9)	.15
†C7	Condenser pulley	.10
†C9	Pointer pulley	.02
†C10	Drive cord	.02
†C11	Drive cord spring	.20
†C12, C13	Dial pointer	.35
†C14	Wire screen grille	.35

*Item number locates the article on the schematic diagram.
†These trimmers cannot be supplied separately.

PRODUCTION CHANGES

- In receivers bearing serial numbers below 1,109,445
a) C10 was returned to B plus instead of the 25L6 cathode as shown on the schematic diagram.
b) A 250,000 ohm 1/4 watt carbon resistor was connected from the cathode of the 6D6 to B plus.
c) C14 was connected from the 25L6 grid to ground.
- In receivers bearing serial numbers below 1,200,686 the speaker was part No. 3QS-257.
a) The speaker was part No. 2VS-157. The voltage across its field was 130 volts.
b) A filter choke, part No. Z2T-196A, was used in series with the B+ lead.
- Below 1,203,000 - C14 was returned to ground instead of the 6C6 cathode as shown on the schematic diagram.

VOLTAGE ANALYSIS

Readings should be taken with a 1000 ohms-per-volt meter. Voltages listed below are from point indicated to ground (chassis) with volume control turned on full and no signal. The line voltage for these readings was 117.5 volts, 60 cycles, a-c.

Tube	Plate	Screen	Cathode	Fil.
6D6	100	100	2.8	6.3
6C6	100	15	1.4	6.3
25L6	93	100	5.7	25.0

Voltage across speaker field—30 volts.
25Z5 cathode to ground—130 volts.

ALIGNMENT PROCEDURE

An oscillator with a frequency of 1400 kc. is required. Use as weak a test signal as possible. An output meter should be used across the voice coil or output transformer for observing maximum response.

Rotate variable condenser to the maximum capacity position and set the pointer at the next calibration mark above 55. Then rotate the variable condenser until the pointer is at 140 and feed 1400 kc to the antenna through a standard dummy antenna (a .0001 mf mica condenser may be used as a substitute), adjust both trimmer condensers on the variable condenser for maximum response.

TUBE DATA

The tube complement is as follows:
1—6D6, r-f amplifier.
1—6C6, biased detector.
1—25L6, beam power output.
1—25Z5, dual half-wave rectifier.