

Emerson Radio & Phonograph Corp.

Model: Q157

Chassis:

Year: Pre October 1938

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

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MODEL Q157

Chassis Q

Schematic, Changes

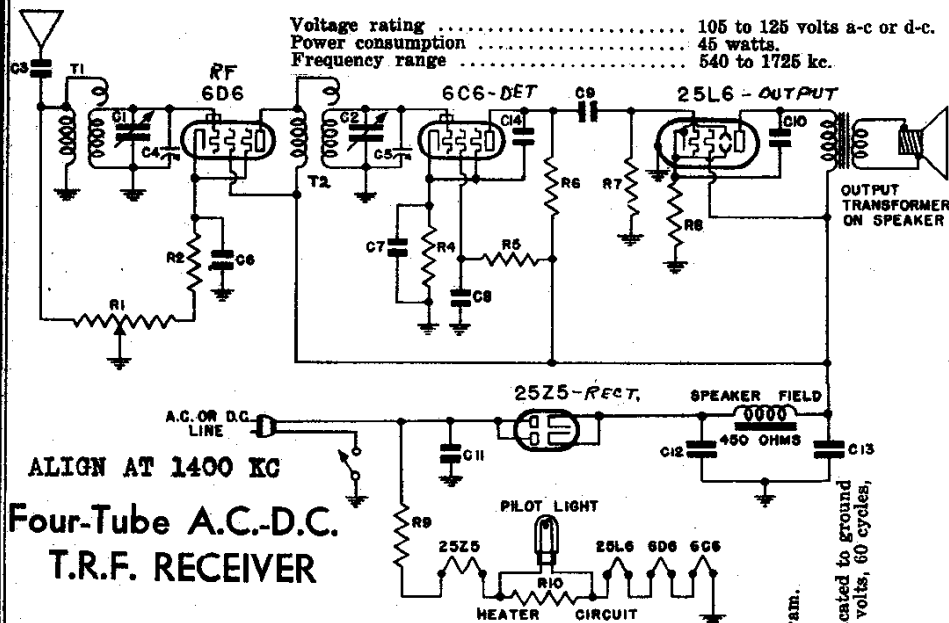
Voltage, Alignment

Parts

EMERSON RADIO & PHONO. CORP.

MODEL Q157

CHASSIS MODEL Q



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

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.

*ITEM	PART NO.	DESCRIPTION	PRICE
T1	2VT-241B	Broadcast antenna coil	..... \$ .60
T2	3QT-344	Broadcast detector coil	..... .55
R1	2VR-219D	Volume control—75,000 ohms	..... 1.00
R2	3RR-276	310 ohm 1/2 watt wire-wound molded resistor	..... .15
R3	OR-73	250,000 ohm 1/4 watt carbon resistor	..... .15
R4	HR-42	2 megohm 1/4 watt carbon resistor	..... .16
R5	KR-56	500,000 ohm 1/4 watt carbon resistor	..... .16
R6	KR-56	500,000 ohm 1/4 watt carbon resistor	..... .16
R7	KR-56	500,000 ohm 1/4 watt carbon resistor	..... .16
R8	3QR-297	110 ohm 1/2 watt wire-wound resistor	..... .16
R9	2DR-213	185 ohm 1/2 watt resistor in line cord (see KKW-46A below)	..... .30
R10	3QC-332	40 ohm metal clad wire-wound resistor	..... 2.45
C1	C2	Two gang variable capacitor	..... .20
C3	C4	0.001 mf roll type capacitor	..... .20
C5	C6	Trimmer part of variable capacitor	..... .20
C7	C8	0.1 mf, 200 volt roll type capacitor	..... .20
C9	C10	0.25 mf, 200 volt roll type capacitor	..... .20
C11	C12	0.03 mf, 400 volt roll type capacitor	..... .20
C13	C14	0.03 mf, 400 volt roll type capacitor	..... .20
		0.1 mf, 400 volt modified type paper capacitor	..... 1.05
		Dual 16 mf, 100 volt dry electrolytic capacitor	..... 1.05
		5" dynamic speaker	..... 4.85
		Pilot light, 6.3 volt 25 amp., Mazda No. 46	..... 1.05
		Line cord with built-in resistor (R9)	..... .15
		Condenser pulley	..... .02
		Pointer pulley	..... .02
		Drive cord	..... .20
		Drive cord spring	..... .35
		Dial pointer	..... .10
		Wire screen grille	..... .10

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

PRODUCTION CHANGES

- In receivers bearing serial numbers below 1,102,445
 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.
- In receivers bearing serial numbers between 1,308,161 and 1,317,310.
 a) The speaker was part No. 2VS-157. The voltage across its field was 130 volts.
 b) A filter choke, part No. ZZR-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	..... 30	..... 15	..... 1.4	..... 6.3
25L6	..... 83	..... 100	..... 6.7	..... 26.0

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 capacitor to the maximum capacity position and set the pointer at the next calibration mark above dummy antenna (a .0001 mf mica condenser may be used as a substitute), adjust both trimmer condensers on the variable condenser for maximum response.