RADIO SERVICE BULLETIN

Issue No. 54.

Date of Issue: November, 1949

Subject: Model B275

SPECIFICATION OF S.T.C. MODEL B 275

CIRCUIT: Five Valve dual wave A.C. operated superheterodyne using converter, one stage of I.F. amplification, detector-audio stage, power output stage, and H.T. Rectifier, A.V.C. inverse feedback, variable tone control.

TUNING RANGE:

Broadcast 535—1620 Kc/s.
Short Wave 5.9—18.2 Mc/s.

INTERMEDIATE FREQUENCY: 455 Kc/s.

VALVE COMPLEMENT:

V1 Frequency Changer 6K8G.
V2 I.F. Amplifier 6U7G.
V3 Detector-Audio 6B8G.
V4 Power Output 6V6G.
V5 H.T. Rectifier 5Y3G.

POWER SUPPLY: 200-240 Volts 40-60 Cycles A.C. consumption 55 watts.

LOUD SPEAKER: Permag 12 inch cone 5,000 ohm Transformer.

CIRCUIT VOLTAGES:

	Plate	Screen	Osc. Plate	Cathode	Heater
V1	240	85	130	2.5	6.2
V2	240	85	—	2.5	6.2
V3	* 45	* 25	—	2	6.2
V4	230	240	—	+ —	6.2
V5	290/290	—	—	265	5

+ — 12 Volts applied to grid
* As read on 250 Volt scale.
These voltages must be measured to receiver earth with voltmeter having a resistance of at least 1000 ohms per volt (Tolerance ± 5%). Volume control must be turned to maximum.

MEASUREMENT SPECIFICATION:

I.F. Sensitivity—V1 grid 25 microvolts.
I.F. Sensitivity—V2 grid 2.5 millivolts.
Broadcast Sensitivity 5 microvolts.
Shortwave Sensitivity 20 microvolts.

These figures are related to an audio frequency output of 14 volts measured between plate of V4 and CHASSIS through a series condenser of .1 MFD capacity.

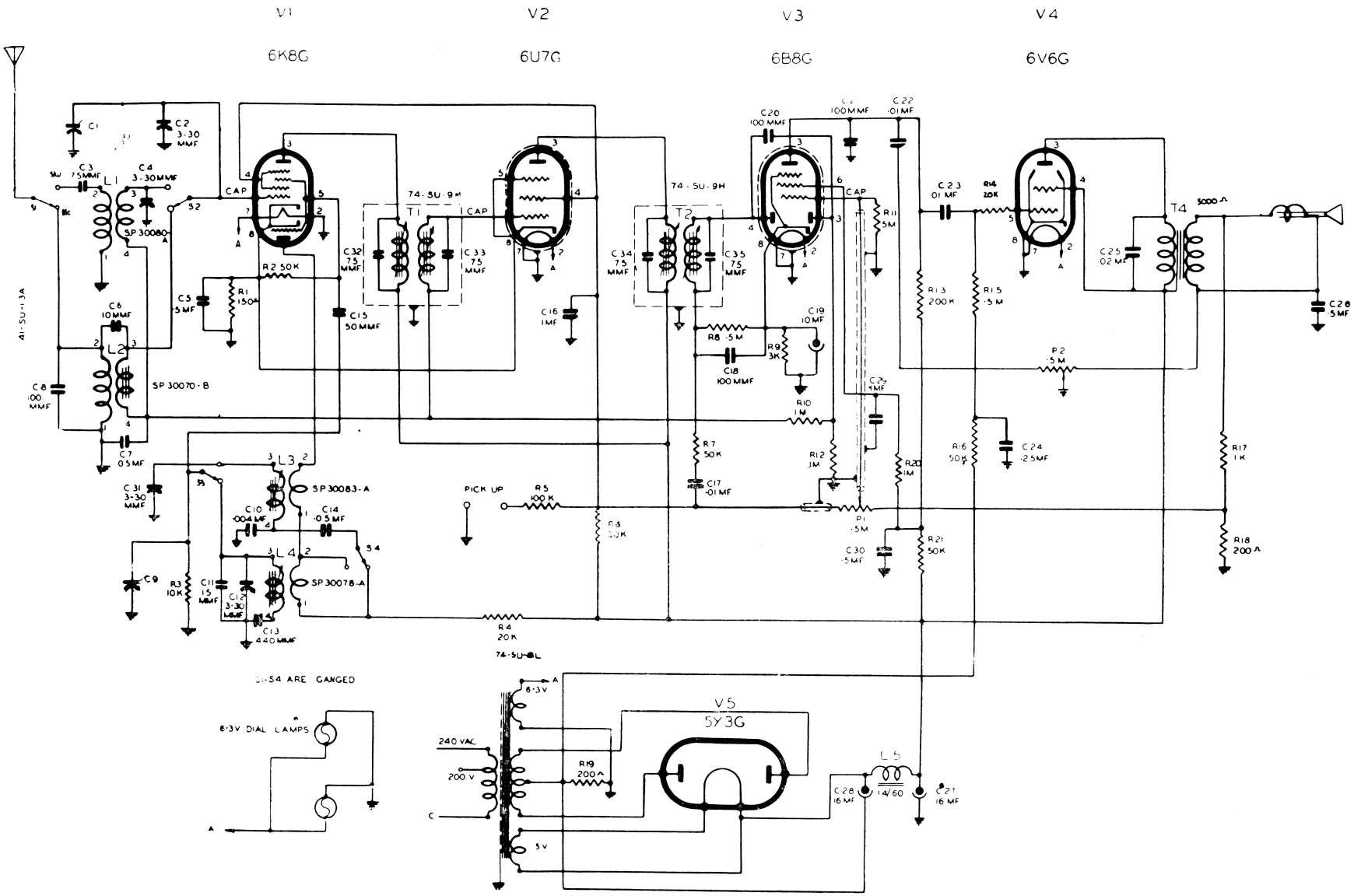
ALIGNMENT FREQUENCIES:

Broadcast 1400 Mc/s and 600 Kc/s.
Shortwave 16 Mc/s and 6 Mc/s.

CHECK POINTS:

Broadcast 1000 Kc/s.
Shortwave 10 Mc/s.

MODEL B275


V1
6K8G
V2
6U7G
V3
6B8G
V4
6V6G
V5
5Y3G
L1
L2
L3
L4
L5
T1
T2
T4
SP 30080
SP 30070-B
SP 30083-A
SP 30078-A
74-5U-9H
41-5U-13A
74-5U-8L
CAP
PICK UP
S1-S4 ARE GANGED
6·3V DIAL LAMPS
240 VAC
200 V
6·3V
5V
C1
C2 3-30 MMF
C3 75MMF
C4 3-30MMF
C5 ·5MF
C6 10MMF
C7 ·05MF
C8 ·00 MMF
C9
C10 ·004MF
C11 15 MMF
C12 3-30 MMF
C13 440MMF
C14 ·05MF
C15 50MMF
C16 1MF
C17 ·01MF
C18 100MMF
C19 10MF
C20 100 MMF
C21 100MMF
C22 ·01MF
C23 ·01 MF
C24 ·25MF
C25 ·02 MF
C26 5MF
C27 16 MF
C28 16 MF
C29 1MF
C30 ·5MF
C31 3-30 MMF
C32 75 MMF
C33 75 MMF
C34 75 MMF
C35 75 MMF
R1 150Ω
R2 50K
R3 10K
R4 20K
R5 100K
R6 50K
R7 50K
R8 ·5M
R9 3K
R10 1M
R11 5M
R12 1M
R13 200K
R14 20K
R15 ·5M
R16 50K
R17 1K
R18 200Ω
R19 200Ω
R20 1M
R21 50K
P1 ·5M
P2 ·5M
5000Ω
14/60