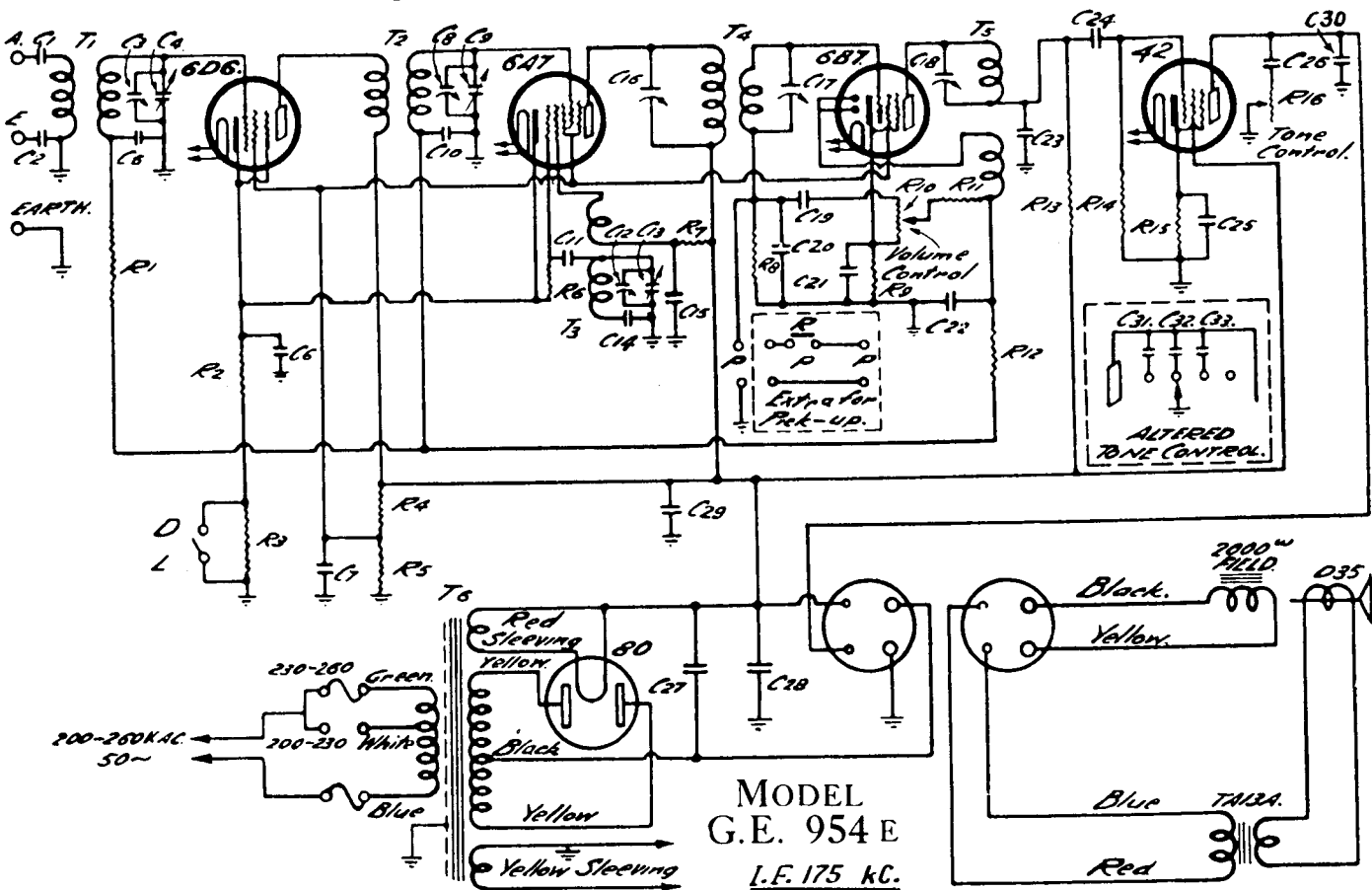


# "G.E." A.C. Operated Broadcast Console Model 954E



## General Electric "954E" 1934 Console Model

Uses 8-inch, 2,000 ohms field loud-speaker.

### COMPONENT VALUES.

#### RESISTORS.

R1, R13—100,000 ohms,  $\frac{1}{4}$  W.; R2—1,200 ohms, w.w.; R3—3,000 ohms, 1 W.; R4—40,000 ohms, 1 W.; R5—20,000 ohms, 1 W.; R6—60,000 ohms,  $\frac{1}{4}$  W.; R7—20,000 ohms,  $\frac{1}{4}$  W.; R8—500,000 ohms,  $\frac{1}{4}$  W.; R9—2,000 ohms, w.w.; R10—250,000 ohms, volume control; R11, R14—300,000 ohms,  $\frac{1}{4}$  W.; R12—1.75 megohms,  $\frac{1}{4}$  W.; R15—400 ohms, 1 W.; R16—25,000 ohms, variable.

#### CONDENSERS.

C1, C2—500 mmfd., mica; C3, C8, C12—10/50 mmfd., B.C. coil trimmers; C4, C9, C13—sections of 3-gang variable; C5, C10, C26—0.05 mfd., paper; C6, C7—0.25 mfd., paper; C11—50 mmfd., mica; C14—900 mmfd., mica, padder; C15, C29—0.1 mfd., paper; C16, C17—100/200 mmfd., I.F.T. trimmers; C18—10/50 mmfd., I.F.T. trimmer; C19, C24, C32—0.01 mfd., paper; C20, C22—200 mmfd., mica; C21—5 mfd., 25 v. W., electro; C23—700 mmfd., mica; C25—25 mfd., 25 v., W., electro.; C27, C28—8 mfd., 500 v., electro; C30, C33—0.005 mfd., paper; C31—0.03 mfd. paper.

#### COILS, ETC.

T1—aer. coil; T2—R.F. coil; T3—osc. coil; T4—1st I.F. transformer; T5—2nd I.F. transformer; T6—power transformer.

#### ALTERATIONS.

In earlier models of this series the tone control was continuously variable, but this was later changed to a four-position switch type. When the change was made R16, C26 and C30 were deleted and were replaced by C31, C32 and C33; the values for all these components will be found in the parts list.

# LIST OF AUSTRALIAN STATIONS

2CO	Corowa .....	535.7	4BC	Brisbane .....	262
7ZL	Hobart .....	517	3YB	Melbourne ....	262
3AR	Melbourne ....	492	2WG	Wagga .....	260
5CK	Crystal Brook	472.4	4TO	Townsville ....	256.4
2FC	Sydney .....	451	3DB	Melbourne ....	254.2
6WF	Perth .....	435	4MK	Mackay .....	252.1
5CL	Adelaide .....	411	5KA	Adelaide .....	250
4QG	Brisbane .....	395	2CH	Sydney .....	248
3LO	Melbourne ....	375	6KG	Kalgoorlie ....	246
2BL	Sydney .....	351	2NC	Newcastle ....	241
6PR	Perth .....	341	3WR	Wangaratta ..	238
7HO	Hobart .....	337	2SM	Sydney .....	236.1
4RK	Rockhampton	330	3TR	Trafalgar .....	234.3
3UZ	Melbourne ....	326	4BK	Brisbane .....	233.5
2GB	Sydney .....	316	3BA	Ballarat .....	230.8
5DN	Adelaide .....	312	5AD	Adelaide .....	229
3BO	Bendigo .....	309	2MO	Gunnedah .....	227
4GR	Toowoomba ..	300	4RO	Rockhampton	225.6
3HA	Hamilton .....	297	2XN	Lismore .....	223.8
2UE	Sydney .....	293	3KZ	Melbourne ....	222.2
5PI	Port Pirie ....	288.4	4BH	Brisbane .....	217.3
2CA	Canberra .....	285.7	2GN	Goulburn .....	215.8
4MB	Maryborough	283	3GL	Geelong .....	214.2
2KY	Sydney .....	280	2KO	Newcastle .....	212
	Swan Hill .....	277.8	3AW	Melbourne ....	210.5
	Launceston ....	272.7	2WL	Wollongong ..	209.06
	Newcastle ....	270	7UV	Ulverstone ....	204.5
	Sydney .....	267	2AY	Albury .....	202.7
	.....	264	3AK	Melbourne ....	200

954-E

"PANDORA"

A.C. OPERATED



*Instructions*  
*for*  
INSTALLING  
*and*  
OPERATING  
*your*



*RADIO RECEIVER*

PUBLISHED BY  
ASSOCIATED

GENERAL   ELECTRIC  
*Industries* *Limited*

# Instructions for Installing and Operating



## "PANDORA"

MODEL 954E — A.C. OPERATED

Read the instructions before proceeding with the installation of the Radio. This instrument operates from 240 volts supply; therefore, it is not safe to interfere with any of the internal wiring or apparatus unless the current is switched off at the power point switch controlling the circuit to which the attachment plug is connected, and the power connector has been removed from the back of the Instrument.

### INSTALLATION.

#### VALVES.

The G.E. 954E has been designed for the use of Radiotrons, therefore to ensure consistent good results and to safeguard the instrument against damage valves other than those specified below should not be used:

- |                   |                   |
|-------------------|-------------------|
| 1 Radiotron 6D6   | 1 Radiotron 6A7 ✓ |
| 1 Radiotron 42 ✓  | 1 Radiotron 6B7 ✓ |
| 1 Radiotron 80. ✓ |                   |

Should the valves be renewed they should be reinserted in the Radio in the position shown on the diagram. Fit all the valve screens, grid clips and valve screen caps as shown in the diagram.

Dial Lamps 8045 D. 6.3V 0.32A  
Philips.

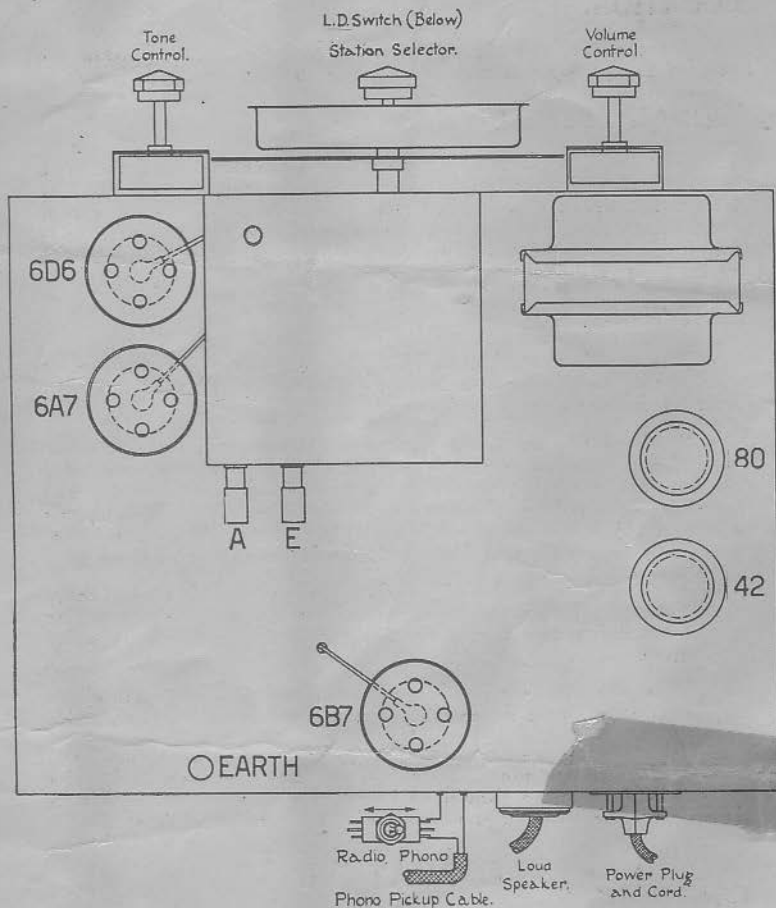


Fig. 1.—Location of Valves and Electric Phonograph Connections.

### LOUDSPEAKER.

See that the loudspeaker plug is inserted in the loudspeaker socket marked "L" located on the back of the chassis.

## LOCATION.

Locate the "Pandora" in a convenient position within ten feet of the power point to which it is to be connected.

## AERIAL SYSTEM.

The G.E. 954E will operate without an earth wire and with an indoor aerial of about 15 feet of wire connected to the aerial terminal marked "A." In certain localities where reception conditions are difficult it may be necessary to use an earth wire and an outdoor aerial. Best results will be obtained with this aerial 20 to 50 feet in length.

## EARTHING.

The terminal marked "EARTH" is provided in accordance with the rules of the Standards Association of Australia, which read as follows :

"Where the receiving equipment is operated by electricity from the supply mains and is used in situations where accidental contact with earth is possible, metal containing cases and exposed metal frames shall be effectively earthed. Where used in situations where accidental contact with earth is not possible, such metal cases and exposed metal frames shall not be earthed."

The terminal marked "E" has been provided as a "radio earth" terminal, and is definitely insulated from the remainder of the receiving equipment by a high voltage test low capacity condenser.

It is recommended that when an earth wire is used to improve reception it be connected to the terminal marked "E."

If an electrical earth wire is required it should be short and direct, of not less than 7/22 cable and efficiently earthed. The aerial and earth wire should be installed and protected in accordance with the rules of the Standards Association of Australia.

## OPERATION.

### CONTROLS.

(1) **STATION SELECTOR** (Upper Centre Knob). By turning this knob the pointer is seen to move around the calibrated scale, indicating the tuning of the instrument in metres and kilocycles.

(2) **VOLUME CONTROL** (Left Hand Knob). When the "Pandora" is tuned to a station the volume will be increased as this knob is rotated clockwise.

(3) **TONE CONTROL** (Right Hand Knob).

(4) **LOCAL-DISTANT SWITCH** (Lower Centre Knob). When listening to strong local stations set this switch to Local (anti-clockwise); otherwise use the Distant position (clockwise).

To operate the G.E. 954E proceed as follows :

1. Connect the Radio to the power point and turn on the switch controlling the circuit. The station selector should now be illuminated. An interval of 30 seconds is required for the valves to heat up before satisfactory operation is obtained.
2. Set the local-distant switch (lower centre knob) to Distant (clockwise).
3. Turn the station selector knob with the right hand so that the pointer indicates the wavelength of the station it is desired to receive and rotate it through a few degrees on either side of this setting.
4. At the same time turn the volume control knob with the left hand so the station is heard at low volume.
5. Now adjust the station selector to a position midway between the points where the quality becomes poor or the signal disappears.  
This adjustment insures the best quality of reproduction.
6. Finally advance the volume control (clockwise) until the desired level is obtained. If the volume control does not allow a sufficiently low minimum volume from a strong local station, set the local-distant switch to Local (turn anti-clockwise).
7. Select the desired tone shading by adjusting the tone control (the right hand knob). For "brilliant" reproduction turn to extreme right, "deep" to the extreme left, and "mellow" midway between these points.
8. When ceasing listening-in, open the power switch controlling the circuit to which the Radio is connected.

## **ELECTRIC PHONOGRAPH.**

The "Pandora" may be used in conjunction with a turntable and "electric pick-up" as an electric phonograph.

1. The pick-up should be connected to the two terminals marked "P" in conjunction with a change-over switch (see diagram).
2. During phonograph operation turn the radio volume control to minimum and the local-distant switch to Local.

# Service Data



## "PANDORA"

MODEL 954E — A.C. OPERATED

### ELECTRICAL SPECIFICATION.

Voltage Rating .. .. .	190-260 Volts.
Frequency Rating .. . . .	50-60 Cycles.
Power Consumption .. . . .	50 Watts.
Tuning Range .. . . .	200-550 Metres.
Intermediate Frequency .. . . .	175 Kilocycles.

### CIRCUITS.

This G.E. 954E is a five valve Superheterodyne as follows :

- 6D6 — R.F. Amplifier.
- 6A7 — Detector-Oscillator.
- 6B7 — I.F. Amplifier, Detector, A.V.C. and Audio Amplifier.
- 42 — Output Pentode.
- 80 — Rectifier.

### VALVE SOCKET VOLTAGES.

240 Volts, 50 Cycles A.C. Supply.

VALVE.	Cath. to Cathode to		Cathode to Plate	Plate Current	Heater Volts.
	Chassis	Screen Grid			
	Volts.	Volts.	Volts.	M.A.	
6D6 R.F.	6.5	45	240	1.0	6.3
6A7 Detector	6.5	45	240	0.4	6.3
Oscillator	—	—	170	2.7	—
6B7 Detector	3.2	48	75	1.3	6.3
42 Pentode	14.5	230	215	31	6.3
80 Rectifier	630/315 volts., 45 m.a. total current				5.0

Voltage across Loudspeaker Field, 90 volts.

### SERVICE.

If your Radio will not operate, and you have no immediate success in locating the trouble, enlist the services of the authorised dealer whose address is given below.



