

Zenith Radio Corp.

Model: 4G800

Chassis:

Year: Pre 1949

Power:

Circuit:

IF:

Tubes:

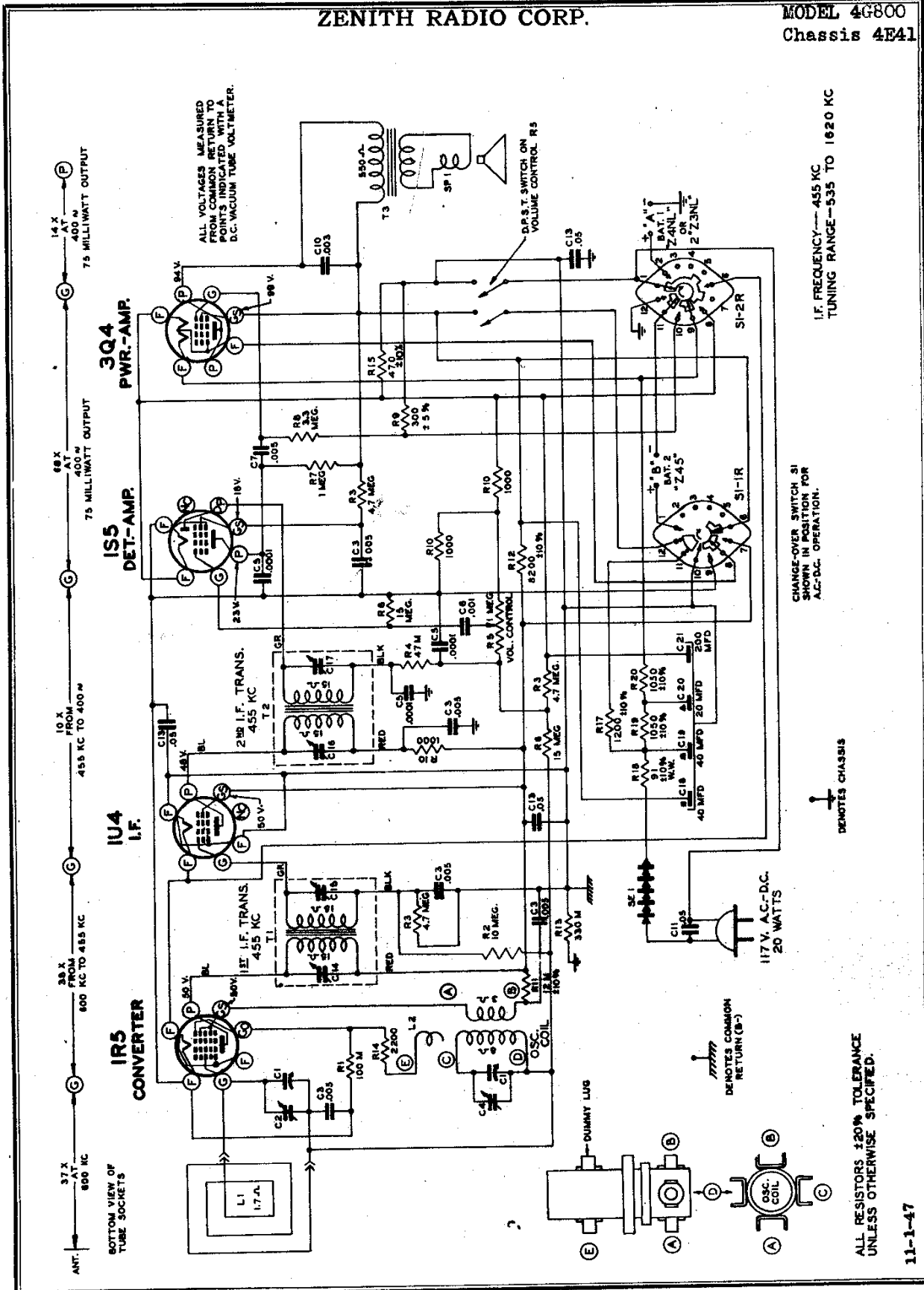
Bands:

Resources

[Riders Volume 17 - ZENITH 17-1](#)

[Riders Volume 17 - ZENITH 17-2](#)

[Riders Volume 20 - CHANGES 20-17](#)



14 X
75 MILLIWATT OUTPUT

88 X
400 W
75 MILLIWATT OUTPUT

10 X
FROM
455 KC TO 400 M

38 X
FROM
800 KC TO 455 KC

37 X
AT
800 KC

ALL VOLTAGES MEASURED
FROM COMMON RETURN TO
POINTS INDICATED WITH A
D.C. VACUUM TUBE VOLTMETER.

D.R.S.T. SWITCH ON
VOLUME CONTROL R5

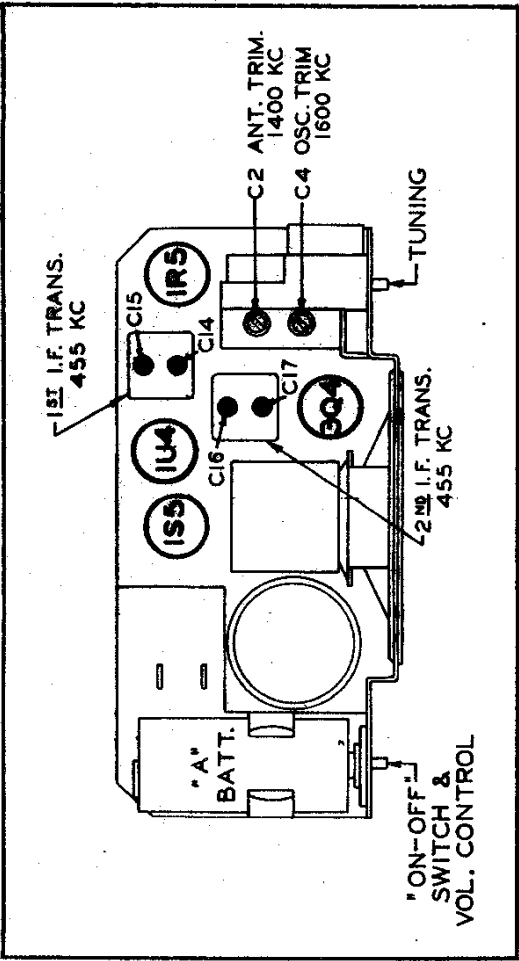
CHANGE-OVER SWITCH S1
SHOWN IN POSITION FOR
A.C.-D.C. OPERATION.

⊕
DENOTES CHASSIS

⊕
DENOTES COMMON
RETURN (B-)

ALL RESISTORS 120% TOLERANCE
UNLESS OTHERWISE SPECIFIED.

I.F. FREQUENCY—455 KC
TUNING RANGE—535 TO 1620 KC



TUBE AND TRIMMER LOCATION

Final alignment of the 4E41 chassis should be made with the chassis installed in the cabinet. Tune in a weak station in the vicinity of 1400 KC and adjust the antenna trimmer for maximum.

ALIGNMENT PROCEDURE

OPERATION	CONNECT OSCILLATOR TO ANTENNA	DUMMY INPUT SIG. FREQUENCY	SET DIAL AT	TRIMMERS	PURPOSE
1	Converter Grid.	455 Kc.	600 Kc.	C14, C15, C16, C17	Align I.F.
2	One Turn Loosely Coupled to Wavemagnet.	1600 Kc.	1600 Kc.	C4	Set Oscillator to Scale --
3		1400 Kc.	1400 Kc.	C2	Adjust for Maximum.

PARTS LIST

REFERENCE NO.	DIAGRAM NO.	DESCRIPTION
8-13768		CABINET ASSEMBLY
8-13769		Handle Strip Assembly.
8-13787		Bottom Cover Assembly.
9-13847		Wavemagnet & Cover Assembly.
12-13779		Handle Support Bracket (R.H.).
12-1380		Handle Support Bracket (L.H.).
43-149		Handle End Piece.
46-683		Front Cover Latch.
46-684		Tuning Control Knob.
46-685		Volume Control Knob.
57-13114		Cabinet Front Plate.
57-13115		Chassis Bottom Plate.
59-200		Dial Pointer.
80-667		Latch Spring.
83-1416		Decorative Strip.
83-1417		Handle Strip - Rubber.
93-870		Grids Coupler Washer.
139-78		Flexible Handle Sleeve.
CONDENSERS		
C1		2 Gang Variable. 450 V
C3		.005 MFD. 500 V
C5		.0001 MFD. 500 V
C6		.001 MFD. 300 V
C7		.001 MFD. 300 V
C10		.005 MFD. 600 V
C11		.003 MFD. 400 V
C13		.05 MFD. 400 V
C14		.06 MFD. 200 V
C15		1st I. F. Trans. Pri. Trim
C16		2nd I. F. Trans. Sec. Trim
C17		2nd I. F. Trans. Pri. Trim
C18		40 MFD. Electro. 150 V
C20		40 MFD. Electro. 150 V
C21		20 MFD. Electro. 150 V
C22		200 MFD. Electro. 10 V
RESISTORS		
R1		100 M Ohm. 1/2 W
R2		10 Megohm. 1/2 W
R3		4.7 Megohm. 1/2 W
R4		47 M Ohm. 1/2 W
R5		1 Meg. Vol. Control.
R6		15 Megohm. 1/2 W
R7		1 Megohm. 1/2 W
R8		2.5 Megohm. 1/2 W
R9		1000 Ohm. 1/2 W
R10		12 M Ohm. 1/2 W
R11		8200 Ohm. 1/2 W
R12		330 M Ohm. 1/2 W
R13		2200 Ohm. 1/2 W
R14		470 Ohm. 1/2 W
R15		1200 Ohm. 1/2 W
R17		91 Ohm. 2 W
R18		1050 Ohm. 2-1/2 W
R19		1050 Ohm. 2-1/2 W
R20		1050 Ohm. 2-1/2 W
COILS AND CHOKES		
L1		Wavemagnet Assembly.
L2		Oscillator Coil Assembly
T1		1st I. F. Transformer.
T2		2nd I. F. Transformer.
MISCELLANEOUS		
S1		Change over Switch.
SE1		3 1/2" P. M. Speaker.
SE1		Speaker Transformer.
SE1		Selenium Rectifier.
OR		Selenium Rectifier.
SE1		Selenium Rectifier.

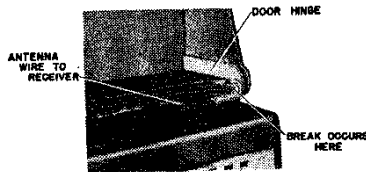
Zenith 4G800 Chassis 4E41

This model appears in *Volume XVII of Rider's Manuals, pages 17-1 and 17-2*. The On-Off switch #85-433 does not completely break contact on some receivers when the lid is closed, causing battery drain. To correct this condition, saw one plastic switch knob 46-736 into 1/16" lengths and place a length on the switch shaft, and then replace the knob. This will force the switch down far enough when the lid is closed to break contact and disconnect the batteries.

In some cases the calibration pointer touches the metal front of the cabinet, thus putting the gang at an a-c potential and causing a hum. To correct this condition place a fibre washer #93-323 between the pointer and the metal dial front. This fibre washer between the metal front panel and the dial pointer, completely prevents this "shorting" condition.

In very rare cases, when hum is encountered and cannot be corrected in any other manner, changing the 1S5 tube is suggested.

On later production runs the 3Q4 tube was replaced with a 3V4 tube. The circuit remains the same in this case. However, the wiring to the tube base has been altered. The 3Q4 is not interchangeable with the 3V4 because of socket connections.



Enough extra lead length should be left when replacing the wavemagnet lead on the Zenith 4G800 so that a break does not occur at the point indicated.

In some cases when the front lid of the receiver is open, the receiver will cut in and out or sometimes be entirely dead. The wire from the wavemagnet to the front door hinge may break at the hinge connection. To correct this condition, remove the handle and resolder these leads, being quite certain that solder is not allowed to run back on the antenna lead and that enough extra antenna lead is allowed for flexing to prevent breakage when the door is open as illustrated in the accompanying diagram.

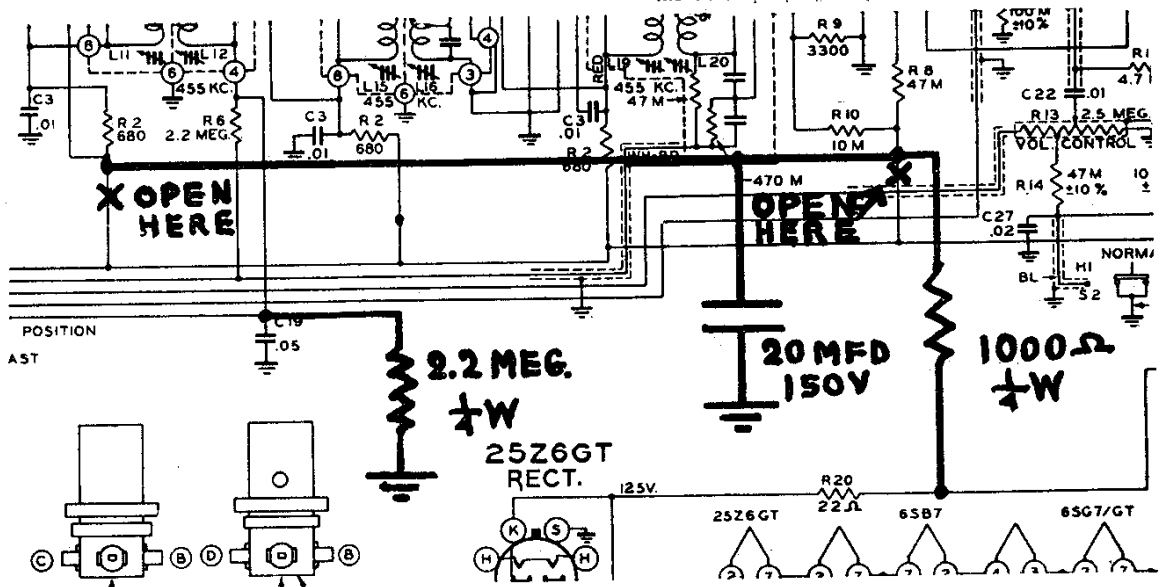
Zenith 6G901, Chassis 6E40

This model appears in *Rider's Volume XVIII, pages 18-7, 18-8, and 18-10*. In some cases when microphonics are encountered they can be eliminated by replacing one or more of the tubes. The offending tube can be located by turning the set on with the volume advanced and the set tuned to an off-station position. Then gently tap each tube, the one emitting the loudest "ping" is the defective item.

Zenith 8H023, 8H034, Chassis 8C01

These models appear on *pages 15-71 to 15-74 of Rider's Volume XV*. The rushing noise that occurs when the volume control is turned to minimum is caused by a poor connection from the grid element to the grid cap of the 6S8GT tube. A hot iron and a little flux on the grid cap will remove the high-resistance solder joint.

If the f-m oscillator drifts, check for a red dot on the oscillator tuning-slug wire. If the wire is unmarked, replace with one which has a red dot. If the receiver flutters on f.m., this may be cured by installing a 22-1635, 20- μ f, 150-V capacitor and two 1/4-watt resistors, 63-583, 1000 ohms, and 63-600, 2.2 Megohms, as indicated in the accompanying diagram.



Drift in the f-m oscillator of the Zenith 8H023 may be corrected by making the changes indicated.