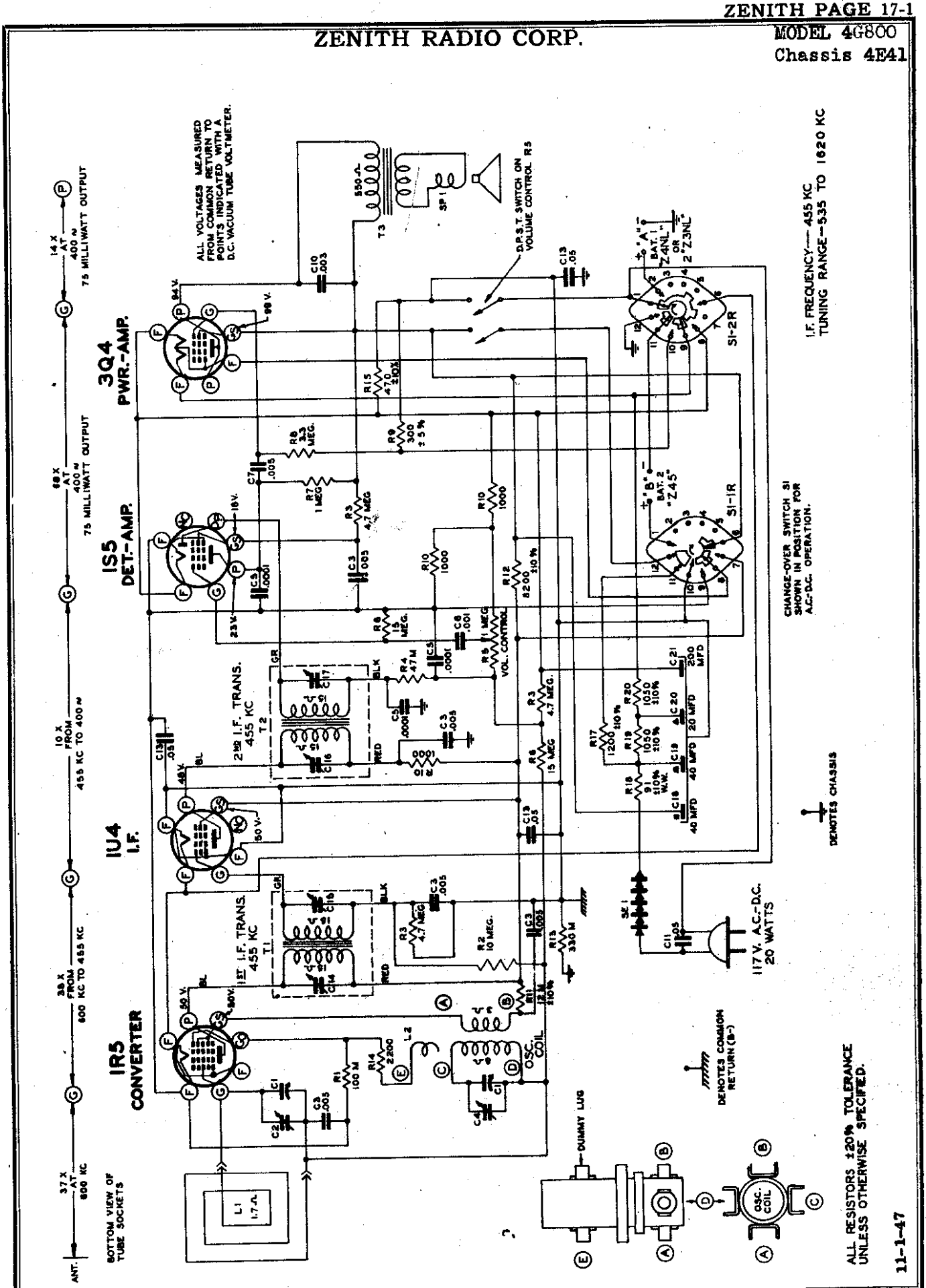
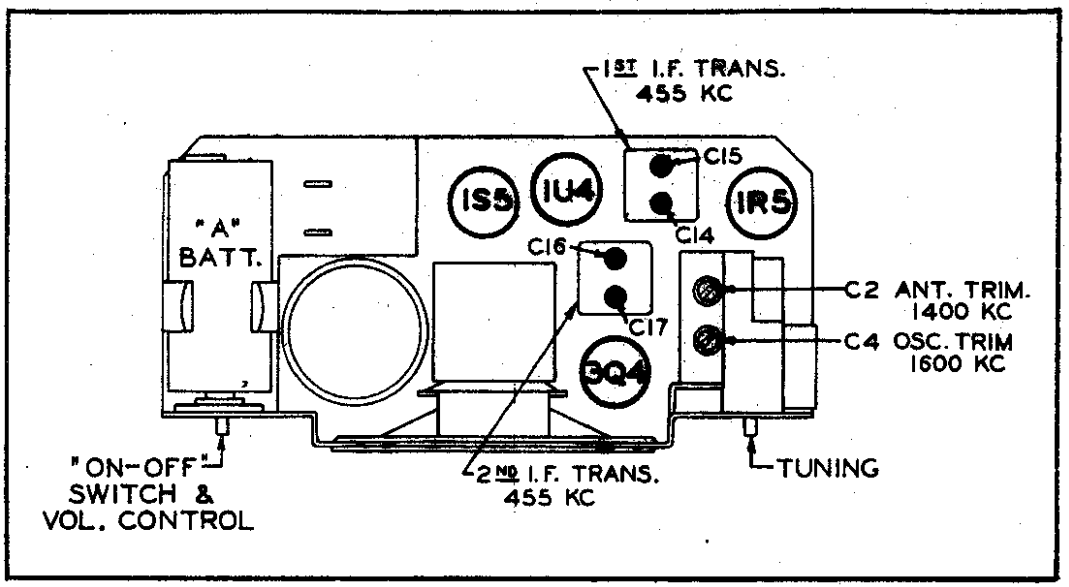
ZENITH RADIO CORP.

MODEL 4G800
Chassis 4E41



PARTS LIST

REFERENCE NO.	DIAGRAM NO.	DESCRIPTION
		CABINET ASSEMBLY
S-13788		Handle Strip Assembly.
S-13793		Bottom Cover Assembly.
S-13847		Wavemagnet & Cover Assembly.
12-1379		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.
57-1314		Cabinet Front Plate.
57-1315		Chassis Bottom Plate
59-200		Dial Pointer
80-567		Latch Spring
83-1416		Decorative Strip
83-1417		Handle Strip - Rubber.
93-870		Fibre Shoulder Washer.
110-127		Grille Cloth
199-79		Flexible Handle Sleeve
		CONDENSERS
22-1457	C1	2 Gang Variable.
22-1706	C3	.005 MFD . . . 450 V.
22-1669	C5	.0001 MFD. . . 500 V.
22-1676 OR 22-1343	C6	.001 MFD . . . 500 V. / .001 MFD . . . 300 V.
22-1175	C7	.005 MFD . . . 600 V.
22-326	C10	.003 MFD . . . 400 V.
22-1660	C11	.05 MFD. . . 400 V.
22-1655	C13	.05 MFD. . . 200 V.
ON T1	C14	1st I. F. Trans. Pri. Trim
ON T1	C15	1st I. F. Trans. Sec. Trim
ON T2	C16	2nd I. F. Trans. Pri. Trim
ON T2	C17	2nd I. F. Trans. Sec. Trim
22-1443	C18	40 MFD. Electro. . . 150 V.
	C19	40 MFD. Electro. . . 150 V.
	C20	20 MFD. Electro. . . 150 V.
	C21	200 MFD. Electro . . 10 V.
		RESISTORS
63-1870	R1	100 M Ohm. . . 1/2 W.
63-1954	R2	10 Megohm. . . 1/2 W.
63-1940	R3	4.7 Megohm . . 1/2 W.
63-1856	R4	47 M Ohm . . . 1/2 W.
63-1553	R5	1 Meg. Vol. Control.
63-1961	R6	15 Megohm. . . 1/2 W.
63-1912	R7	1 Megohm . . . 1/2 W.
63-1933	R8	3.3 Megohm . . 1/2 W.
63-1762	R9	300 Ohm. . . 1/2 W.
63-1786	R10	1000 Ohm . . . 1/2 W.
63-1831	R11	12 M Ohm . . . 1/2 W.
63-1824	R12	8200 Ohm . . . 1/2 W.
63-1891	R13	330 M Ohm. . . 1/2 W.
63-1800	R14	2200 Ohm . . . 1/2 W.
63-1771	R15	470 Ohm. . . 1/2 W.
63-1789	R17	1200 Ohm . . . 1/2 W.
63-1564	R18	91 Ohm . . . 2 W.
63-1647	R19	1050 Ohm . . . 2-1/2 W.
	R20	1050 Ohm . . . 2-1/2 W.
		COILS AND CHOKES
S-13786	L1	Wagemagnet Assembly.
S-13774	L2	Oscillator Coil Assembly
95-1015	T1	1st I. F. Transformer.
95-1016	T2	2nd I. F. Transformer.
		MISCELLANEOUS
85-400	S1	Change over Switch
49-587	SP1	5½" P. M. Speaker.
95-1014	T3	Speaker Transformer.
212-2 OR 212-4	SE1	Selenium Rectifier



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	DUMMY ANTENNA	INPUT SIG. FREQUENCY	SET DIAL AT	TRIMMERS	PURPOSE
1	Converter Grid.	.1 MFD	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 -- Adjust for Maximum.
3			1400 Kc.	1400 Kc.	C2	

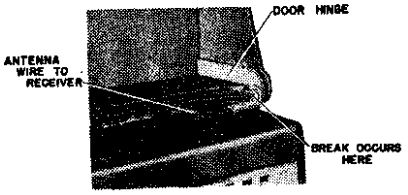
Zenith 4G800 Chassis 4E41

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.

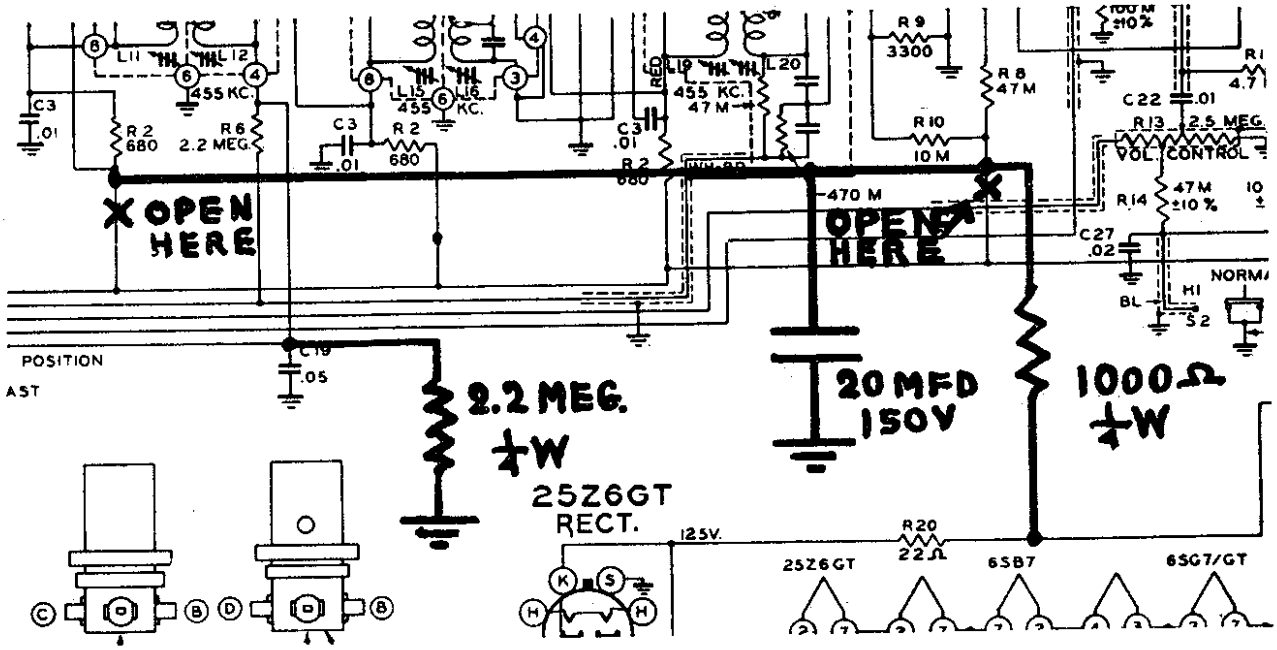
Zenith 6G801, Chassis 6E40

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-μf, 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.