

## Jewel Electrical Instrument Co.

**Model:** 304

**Chassis:**

**Year:** Pre 1950

**Power:**

**Circuit:**

**IF:**

**Tubes:**

**Bands:**

### Resources

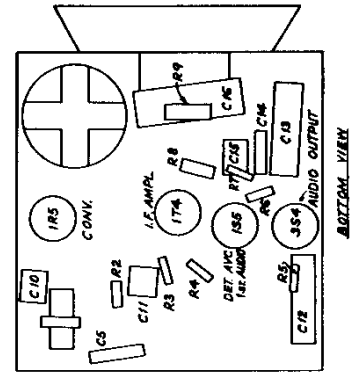
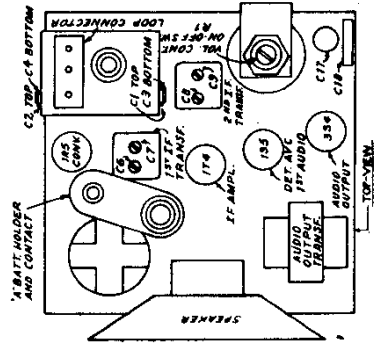
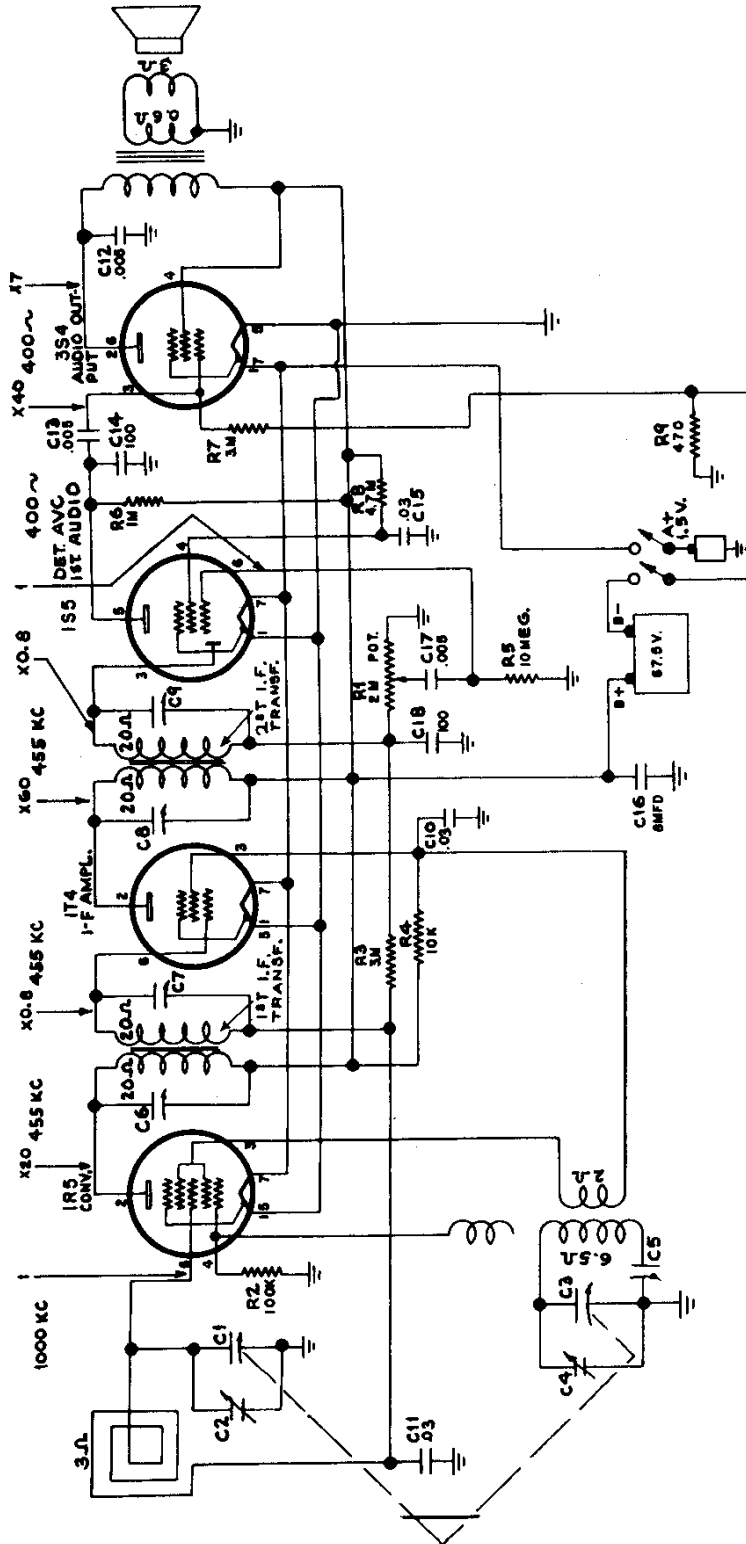
[Riders Volume 19 - JEWEL 19-3](#)

[Riders Volume 19 - JEWEL 19-4](#)

JEWEL RADIO CORP.

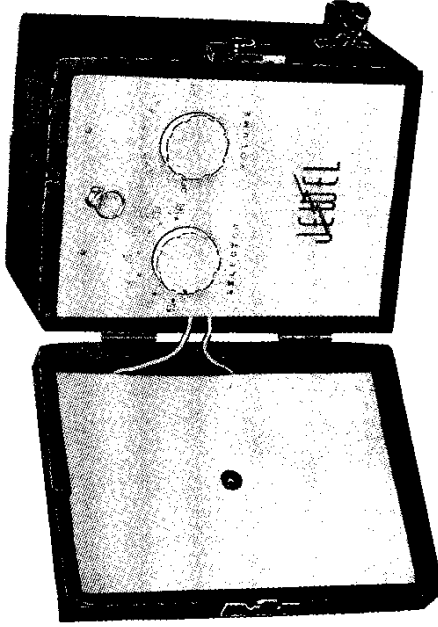
MODEL 304,  
Pixie

APPROX. GAIN PER STAGE USING CHANNELYST AND WITH A FIXED BIAS OF -3 VOLTS



JEWEL RADIO CORP.

MODEL 304,  
Pixie



TUBE	PIN	V <sub>1</sub> W	20,000/V	1,000/V	RESISTANCE
1B5 conv.	1	0	0	0	0
	2	62	62	62	over 500K
	3	50	50	44	over 500K
	4	-1.2	-0.2	0	100K
	5	-3	-1.4	-0.2	0
	6	-0.3	0	0	4 megs.
	7	1.4	1.4	1.4	0.2 ohm
1P4 I-F. AMPL.	1	0	0	0	0
	2	62	62	62	over 500K
	3	50	50	44	over 500K
	4	-0.3	0	0	4.5 megs.
	5	0	0	0	0
	6	-0.3	0	0	4.5 megs.
	7	1.4	1.4	1.4	0.2 ohm
1B5 DET. A.V.C. 1st audio	1	0	0	0	0
	3	-0.4	-0.2	0	1.8 megs.
	4	14	12	2	over 5 megs.
	5	24	20	4	over 1 meg.
	6	-0.3	0	0	10 megs.
	7	1.4	1.4	1.4	0.2 ohm
	394 audio output	1	1.4	1.4	1.4
2		60	60	60	over 500K
3		-4.5	-0.5	0	3 megs.
4		62	62	62	over 500K
5		0	0	0	0
6		60	60	60	over 500K
7		1.4	1.4	1.4	0.2 ohm

ALIGNMENT PROCEDURE

Connect output meter across voice coil.

Connect the signal generator to the standard Hazeltine Loop Model 1150 and couple it loosely to the receiver loop. Set the volume control at maximum, and fully mesh the tuning capacitor.

The output of the signal generator should be just sufficient to give a readable deflection on the output meter.

ALL VOLTAGE AND RESISTANCE MEASUREMENTS MADE WITH RESPECT TO CHASSIS GROUND.  
AND WITH A SUPPLY VOLTAGE OF 67 1/2 DC

Set the signal generator to 455 kc and adjust i-f trimmers for maximum output in the following order: C3, C8, C7, C6. Repeat sequence if trimmers were badly maladjusted.

Set the signal generator and receiver to 1520 kc and adjust the oscillator trimmer C4 for maximum output.

Set the signal generator and receiver to 1500 kc and adjust the antenna trimmer C2 for maximum output.

Set the signal generator and receiver to 1520 kc and readjust oscillator trimmer C4 for maximum output.