Galvin Mfg. Co.

	Model: 59T5	**Chassis:**	**Year:** Pre October 1938
	Power:	**Circuit:**	**IF:**
	Tubes:		
	Bands:		

Resources

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MODELS 59K1,59T1,59T2
59T3,59T4,59T5,69K1
Trimmers,Alignment

GALVIN MFG. CO.

Sensitivity,Gain
Voltage

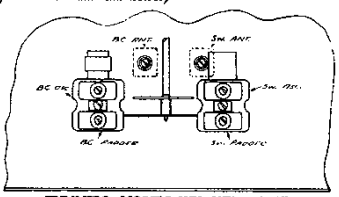
MODELS 59T1. 59T2, 59T3, 59T4, 59T5, 59K1, 69K1

GALVIN MANUFACTURING CORPORATION, 4545 W. Augusta Blvd., CHICAGO

ALIGNMENT PROCEDURE

MODELS 59T5, 59K1 and 69K1

1. Connect signal generator to control grid of Osc.-Mod. tube (6A7) through a .05 MF. condenser and to chassis. Do not remove grid cap. Also connect output meter across speaker voice coil. Turn band switch to "Broadcast" position. Turn condenser gang completely out of mesh.
2. Set signal generator at 455 K.C. and carefully adjust the four I.F. trimmers *(located in top of I.F. coil cans)* to point showing highest reading on output meter.
3. Leave band switch in "Broadcast" position. Connect signal generator to antenna and ground terminals, using a .0002 MF condenser in antenna lead.
4. Set signal generator and receiver dial both at 1700 K.C. Adjust BC OSC. trimmer until 1700 K.C. signal is heard.
5. Set signal generator at 1400 K.C. and turn condenser gang to the signal at 1400 K.C. Adjust BC ANT. trimmer to point showing highest reading on output meter.
6. Set signal generator at 600 K.C. and rock pointer at 600 K.C. position on dial scale, while adjusting BC padder, until combination is found which gives highest output reading. *(NOTE: If there is noise level at 600 K.C., padder can be adjusted to maximum noise without rocking gang and without use of signal generator. Use short wire for pick-up if necessary.)*
7. Turn band switch to "Short Wave" position. Replace .0002 MF condenser in signal generator lead with a 400 ohm carbon resistor.
8. Set signal generator and receiver dial both at 18.0 MC. Adjust S.W. OSC. trimmer until 18.0 MC signal is heard.
9. Set signal generator at 16.0 MC and turn condenser gang to signal at 16.0 MC. Adjust S.W. ANT. trimmer to point giving greatest output reading. *(Use non-metallic screw driver.)*
10. Set signal generator at 6.0 MC and rock pointer at 6.0 MC position on dial scale, while adjusting S.W. padder, until combination is found which gives highest output reading. *(NOTE: May also be adjustable to maximum noise.)*



TRIMMERS—MODELS 59T5, 59K1 and 69K1

MODELS 59T1, 2, 3, and 4

NOTE: When aligning 59T1 and 59T3 AC-DC models, it is advisable to use a blocking condenser in series with the ground connection to the signal generator. If your signal generator is AC operated it may not be possible to connect to 6A7 grid for I.F. alignment of AC-DC models, on account of AC hum. If this is so, feed 455 KC signal into antenna lead, advancing signal generator attenuator accordingly.

1. Connect signal generator to control grid of Osc.-Mod. tube (6A7) through a .05 MF condenser, and to chassis. Do not remove grid cap. Also connect output meter across speaker voice coil. Turn condenser gang completely out of mesh.
2. Set signal generator to 455 KC and carefully adjust the I.F. trimmers to point showing highest reading on output meter.
3. Connect signal generator to antenna and ground leads using a .0002 MF condenser in antenna lead.
4. Set signal generator and receiver dial both at 1700 KC. Adjust Osc. trimmer (on small section of condenser gang) until 1700 KC signal is heard.
5. Set signal generator at 1400 KC and turn condenser gang to the signal at 1400 K.C. Adjust antenna trimmer (on large section of condenser gang) to point showing highest reading on output meter.

SENSITIVITY AND STAGE GAIN MEASUREMENTS

These stage gain measurements will, if properly used, enable you to localize trouble quickly. They are intended for use with a signal generator that is accurately calibrated in microvolts.

Starting with the intermediate frequency stage, working back stage by stage finally to the antenna terminal, the circuit in which the trouble exists will quickly be determined by evidence of low gain, when signal generator attenuation readings are compared to the normal values as shown in the tables.

All stage-gain measurements must be made with the volume control set for full volume. The shielded lead from the signal generator is connected to the top grid terminal of the tube through a .1 MF condenser, with a 500M Ohm resistor connected as a leak resistance between the grid of the tube and the grid cap which has been removed.

When measuring over-all sensitivity at the antenna terminal, use a .0002 MF condenser in place of the .1 MF.

It must be remembered that the figures in the table are average, and allowance must be made for variations between two sets of the same general type, due to difference of tube characteristics, etc.

Stage gains are not given for Models 59T1 and 59T3 because of the difficulty in making accurate measurements on AC-DC receivers with the average signal generator, due to AC hum.

MODELS 59T2 AND 59T4

Microvolt Input	Generator Set at	Generator Connected to	Dummy Antenna Capacity	Leak Resistance	Output Meter **
2800	455 K.C.	6D6 Grid	.1 MF	.5 Meg	.4 Volts
50	455 K.C.	6A7 Grid	.1 MF	.5 Meg	.4 Volts
55	600 K.C.	6A7 Grid	.1 MF	.5 Meg	.4 Volts
20	600 K.C.	Ant. Lead	.0002 MF	None	.4 Volts

MODELS 59T5, 59K1 AND 69K1

Microvolt Input *	Generator Set at	Generator Connected to	Dummy Antenna Capacity	Leak Resistance	Output Meter **
2500	455 K.C.	6D6 Grid	.1 MF	.5 Meg	.25 Volts
25	455 K.C.	6A7 Grid	.1 MF	.5 Meg	.25 Volts
35	600 K.C.	6A7 Grid	.1 MF	.5 Meg	.25 Volts
15	600 K.C.	Ant. Lead	.0002 MF	None	.25 Volts

* For .05 Watts output. ** Output meter connected across voice coil.

SOCKET VOLTAGES

Numerals refer to socket terminals as indicated on circuit diagram

MODELS 59T1 AND 59T3 — POWER CONSUMPTION 50 WATTS

TUBE	POSITION	1	2	3	4	5	6	7	8
6A7	Osc.-Mod.	AC	85	55	85	0	7.5	AC	—
6D6	I.F.	AC	85	85	7.5	7.5	AC	—	—
75	Det.-Avc	AC	50	0	0	6.0	AC	—	—
25A7G	Output	100	AC	95	85	0	AC	AC	7.5
	Rect.								

MODELS 59T2 AND 59T4 — POWER CONSUMPTION 55 WATTS

TUBE	POSITION	1	2	3	4	5	6	7
6A7	Osc.-Mod.	6.0 AC	220	100	140	—10.0	0	0
6D6	I.F.	6.0 AC	220	106	0	0	0	—
75	Det.-Avc	8.0 AC	90	—.7	—6	—1.7	0	—
41	Output	6.0 AC	215	215	NOTE A	0	0	—
80	Rect.	385	AC	AC	305	—	—	—

NOTE A:—15 V. Measured at Bias Resistor.

MODELS 59T5 AND 59K1 — POWER CONSUMPTION 65 WATTS

TUBE	POSITION	1	2	3	4	5	6	7
6A7	Osc.-Mod.	6.0 AC	260	120	190	—28	0	0
6D6	I.F.	6.0 AC	260	120	0	0	0	—
75	Det.-Avc	6.0 AC	110	—.9	—1.3	—2.3	0	—
41	Output	6.0 AC	320	280	NOTE A	0	0	—
80	Rect.	325	AC	AC	325	—	—	—

NOTE A:—20 V. Measured at Bias Resistor.

MODEL 69K1 — POWER CONSUMPTION 80 WATTS

TUBE	POSITION	1	2	3	4	5	6	7	8
6A7	Osc.-Mod.	6.0 AC	207	96	157	—10	0	0	—
6D6	I.F.	6.0 AC	207	96	0	0	0	—	—
6Q7G	Det.-Avc	0	0	105	—1.5	—1.5	—	6.0 AC	—2.0
42	Output	6.0 AC	230	207	0	10	0	—	—
42	Output	6.0 AC	230	207	0	10	0	—	—
80	Rect.	322	AC	AC	322	—	—	—	—

All measurements made with 1000 ohms per volt meter.
On AC-DC models measure voltages from B— to socket terminal indicated.
On AC models measure from chassis ground to socket terminal indicated.
Line voltage 117 Volts.