

Firestone Tire & Rubber Co.

Model: S-7393-1

Chassis:

Year: Pre 1945

Power:

Circuit:

IF:

Tubes:

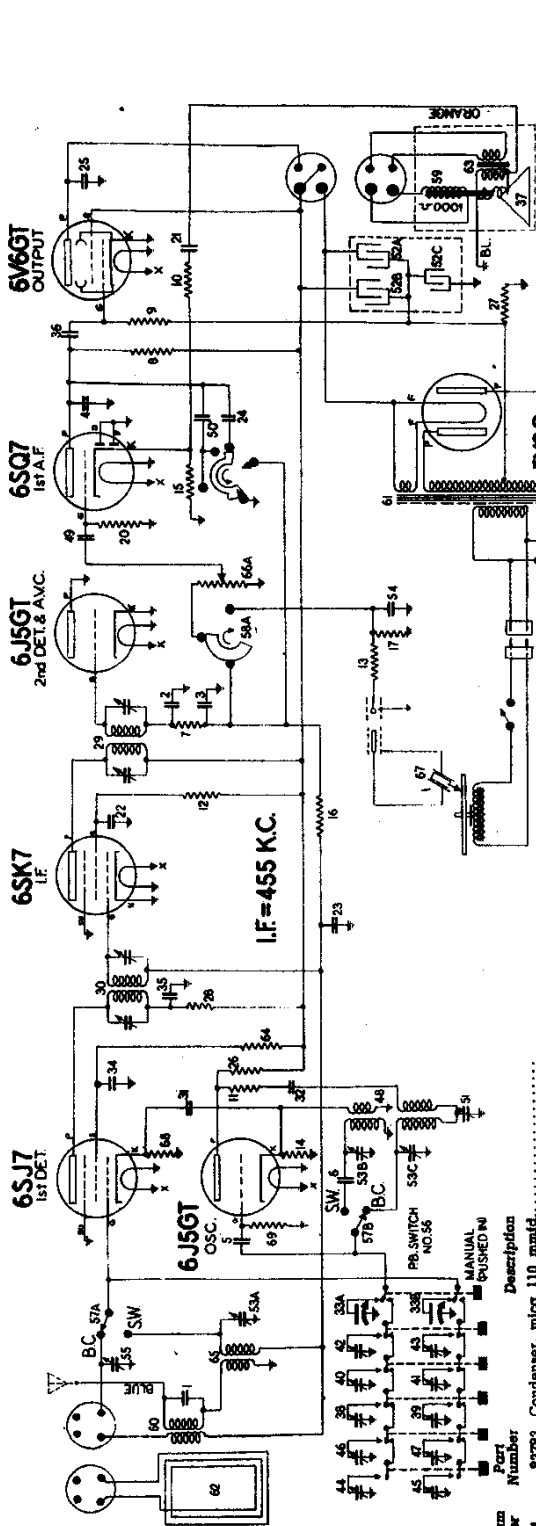
Bands:

Resources

[Riders Volume 14 - FIRESTONE 14-1](#)

[Riders Volume 14 - FIRESTONE 14-2](#)

FIRESTONE TIRE & RUBBER CO.



NOTE: A 33,000 ohm 2W. resistor is connected from 5V6GT screen to chassis (not shown).

ELECTRICAL PARTS

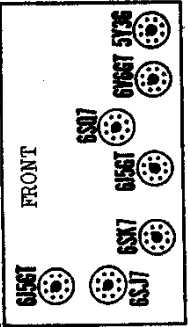
Diagram Number	Part Number	Description
52	501050	Condenser—electrolytic
		Section A—20 mid. 400 volt
		Section B—15 mid. 400 volt
		Section C—20 mid. 25 volt
53A to 53C	180430	Condenser—trimmer
54	180443	Condenser—trimmer
55	500056	Switch—push button
57A-57B	500057	Switch—Radio-Phono tone
58A-58B	501028	Switch—Dynamic 10"
59	M 500948	Speaker—Dynamic 10"
60	500285	Coil—compensating
		Diagram Number
	500118	Transformer—power (50-80 cycle)
	500293	Transformer—power (25 cycle)
	500294	Transformer—power (25 cycle)
62	M 500948	Transformer—output for M-500948 speaker
64	112982	Resistor—carbon 150,000 ohms 1/4 watt.
65	500147	Coil—short wave antenna
66A-66B	501027	Volume control—1 mesg. (with switch)
67	161289	Crystal cartridge
68	112982	Resistor—carbon 330 ohms 1/4 watt.
69	110552	Resistor—carbon 47,000 ohms 1/4 watt.

NO SIGNAL CONDITION
SOCKET VOLTAGES—ALL D.C. POTENTIAL MEASURED TO CHASSIS
DIAL TUNED TO 540 KC.

TUBE	FUNCTION	H	K	G	S	SU	P	D ₁	D ₂
6SJ7	1st Det.	6.0 A.C.	9.0	0	105	0	220		
6J5GT	Osc.	6.0 A.C.	0	-3			165		
6SK7	I.F.	6.0 A.C.	0	0	46	0	230		
6J5GT	2nd Det.—A.V.C.	6.0 A.C.	0	0			0		
6SQ7	1st A.F.	6.0 A.C.	1	0			75	0	0
6V6GT	Output	6.0 A.C.	0	Note A	230		220		
5Y3G	Rectifier	5.0 A.C.							Pictes 350 V.A.C. to C.T.

NOTE A: The 5V6GT grid bias voltage is -13.5 volts measured across resistor No. 27. Use a high resistance voltmeter of at least 1000 ohms per volt.

Diagram Number	Part Number	Description
1 to 4	83783	Condenser, mica 110 mmfd.
5	85051	Condenser, mica 200 mmfd.
6	105257	Resistor—carbon 47,000 ohms 1/4 watt.
6-9	110553	Resistor—carbon 220,000 ohms 1/4 watt.
10	110553	Resistor—carbon 6800 ohms 1/4 watt.
11	110590	Resistor—carbon 180 ohms 1/4 watt.
12-13	110590	Resistor—carbon 100,000 ohms 1/4 watt.
14-15	110590	Resistor—carbon 90 ohms 1/4 watt.
16	110570	Resistor—carbon 330,000 ohms 1/4 watt.
17	112982	Resistor—carbon 330,000 ohms 1/4 watt.
18	112982	Resistor—carbon 330,000 ohms 1/4 watt.
19	112975	Resistor—carbon 10 meg. 1/4 watt.
20	112975	Resistor—carbon 10 meg. 1/4 watt.
21	116823	Condenser—1 mid. 600 volt.
22	119414	Condenser—.02 mid., 600 volt.
23	116819	Condenser—.05 mid., 600 volt.
24	119416	Condenser—.08 mid., 600 volt.
25	119417	Condenser—.106 mid., 600 volt.
26	118817	Resistor—100 ohms 1/4 watt.
27	118812	Resistor—180 ohms 1/4 watt W.W.
28	110557	Resistor—carbon 4700 ohms 1/4 watt.
29	119024	Transformer—2nd I.F.
30	500801	Transformer—1st I.F.
31-32	19193	Condenser—1 mid. 600 volt.
33A-33B	19193	Condenser—variable tuning
34-35-36	19281	Condenser—400 volt.
37	M 500948	Coil—Volo coil for M-500948 speaker
39 to 41	119663	Condenser—push button trimmer (med. freq.)
42-43	119664	Condenser—push button trimmer (high freq.)
44 to 47	119753	Condenser—push button trimmer (low freq.)
48	500248	Coil—oscillator
49-50	119875	Condenser—.002 mid., 800 volt.
51	119834	Condenser—padding



MODEL S-7393-1,
Code A-400
MODEL S-7400-1

FIRESTONE TIRE & RUBBER CO.

TO SET UP THE BUTTONS FOR AUTO-MATIC TUNING:

1. Turn the set on and allow it to operate at least fifteen minutes before attempting to set up the buttons.
2. Make a list of the frequencies of five nearby stations to which you wish to set up the buttons. Be sure to select the most powerful nearby stations, since weak signals will not give as satisfactory results.
3. Turn the set around so that the back of the set is facing you. Through the ten holes in the plate just under the dial will be seen ten adjusting screws (see Fig. 1). These screws are used to tune in the stations that the buttons are to be set to.
4. Each of the push buttons can be made to tune in stations in a definite frequency range as shown in Fig. 1. It is imperative that in setting up the buttons, you select stations whose frequency is in the indicated range of that button.
5. Turn the BAND SWITCH to the "AM" position, push in the button labeled "MANUAL," then using the tuning knob (see Fig. 1) tune in the station you wish to set to button No. 1.
6. Push in button No. 1 and using a screwdriver turn adjusting screw No. 1a until the station you had previously tuned in is again heard. If it is not heard, advance the volume control and adjust the screw again. Be sure to adjust screw No. 1a to the point where the program is heard with the deepest tone.
7. Insert the screwdriver in adjusting screw No. 1b and turn it until the program is heard with deepest tone. Now again check the setting of screw No. 1a making sure it is adjusted to give maximum volume.
8. The set-up for button No. 1 is now complete.
9. To set up the remaining buttons use the same procedure; push in the "MANUAL" button, tune in the station using the tuning knob; push in the button to be set up; adjust its associated "a" adjusting screw until the station is tuned in (screw 2a for button No. 2 etc., see Fig. 1); the associated "b" screw is then adjusted for deepest tone as before.

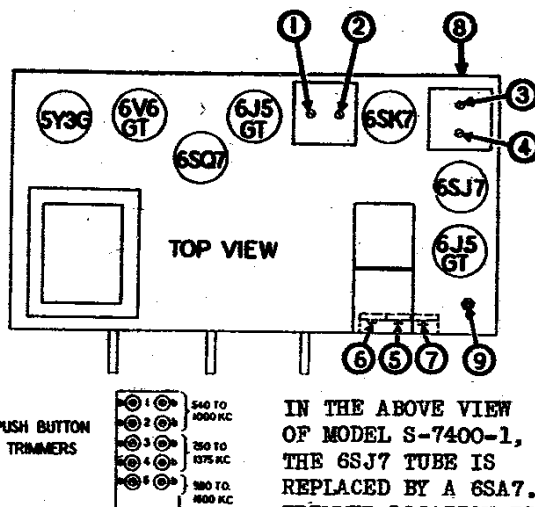


Fig. 1

IN THE ABOVE VIEW OF MODEL S-7400-1, THE 6SJ7 TUBE IS REPLACED BY A 6SA7. TRIMMER LOCATION IS THE SAME IN BOTH MODELS.

ALIGNMENT EQUIPMENT & PROCEDURE

1. Connect the output meter across the voice coil or from plate of the 6V6GT output tube to chassis through a .1 mfd. condenser. (The more sensitive type should be connected across the voice coil.)
2. Connect the ground lead of the signal generator to the receiver chassis.
3. Turn the RADIO-PHONO TONE SWITCH to the "Radio-Speech" position.
4. Turn the volume control to the maximum position and keep it in this position throughout the alignment procedure.
5. Push in the "Manual" button and keep it pushed in. Check the pointer to see that it is correctly set to 540 KC, with gang in full mesh.
6. The loop must be connected as indicated in circuit diagram at all times.

Dummy Ant. in Series with Sig. Gen.	Connection of Sig. Generator Output to Receiver	Signal Generator Frequency	Band Switch Position	Receiver Dial Setting	Trimmer Number	Trimmer Description	Type of Adjustment
.1 MFD. Condenser	Lug on front Section of Gang Cond.	455 KC	American	Any Point Where It Does Not Affect the Signal	1-2 3-4	2nd LF. 1st LF.	Adjust for Maximum Output. Then repeat Adjustment.
400 OHM Carbon Resistor	Antenna Terminal (Blue Wire)	16 MC	Foreign	16 MC	5	Foreign Oscillator	Adjust for Maximum Output. Check to see if Proper Peak was Obtained by Tuning in Image at Approx. 15.1 MC. If Image does not appear, Realign at 16 MC, with Trimmer Screw farther out. Recheck Image.
400 OHM Carbon Resistor	Antenna Terminal (Blue Wire)	16 MC	Foreign	Tune to 16 MC Generator Signal	6	Foreign Antenna	Adjust for Maximum Output. Try to Increase Output by Detuning Trimmer and Retuning Receiver Dial until Maximum Output is Obtained.
200 MMFD. Mica Condenser	Antenna Terminal (Blue Wire)	1500 KC	American	1500 KC	7	Broadcast Oscillator (Shunt)	Adjust for Maximum Output.

Now replace the chassis and loop antenna in the cabinet before proceeding further.

200 MMFD. Mica Condenser	Antenna Terminal (Blue Wire)	1500 KC	American	Tune to 1500 KC Generator Signal	8	Broadcast Antenna	Adjust for Maximum Output.
200 MMFD. Mica Condenser	Antenna Terminal (Blue Wire)	600 KC	American	Tune to 600 KC Generator Signal	9	Broadcast Oscillator (Series)	Adjust for Maximum Output. Try to Increase Output by Detuning Trimmer and Retuning Receiver Dial until Maximum Output is Obtained.