General Electric Co.

	Model: 30	**Chassis:**	**Year:** Pre 1945
	Power:	**Circuit:**	**IF:**
	Tubes:		
	Bands:		

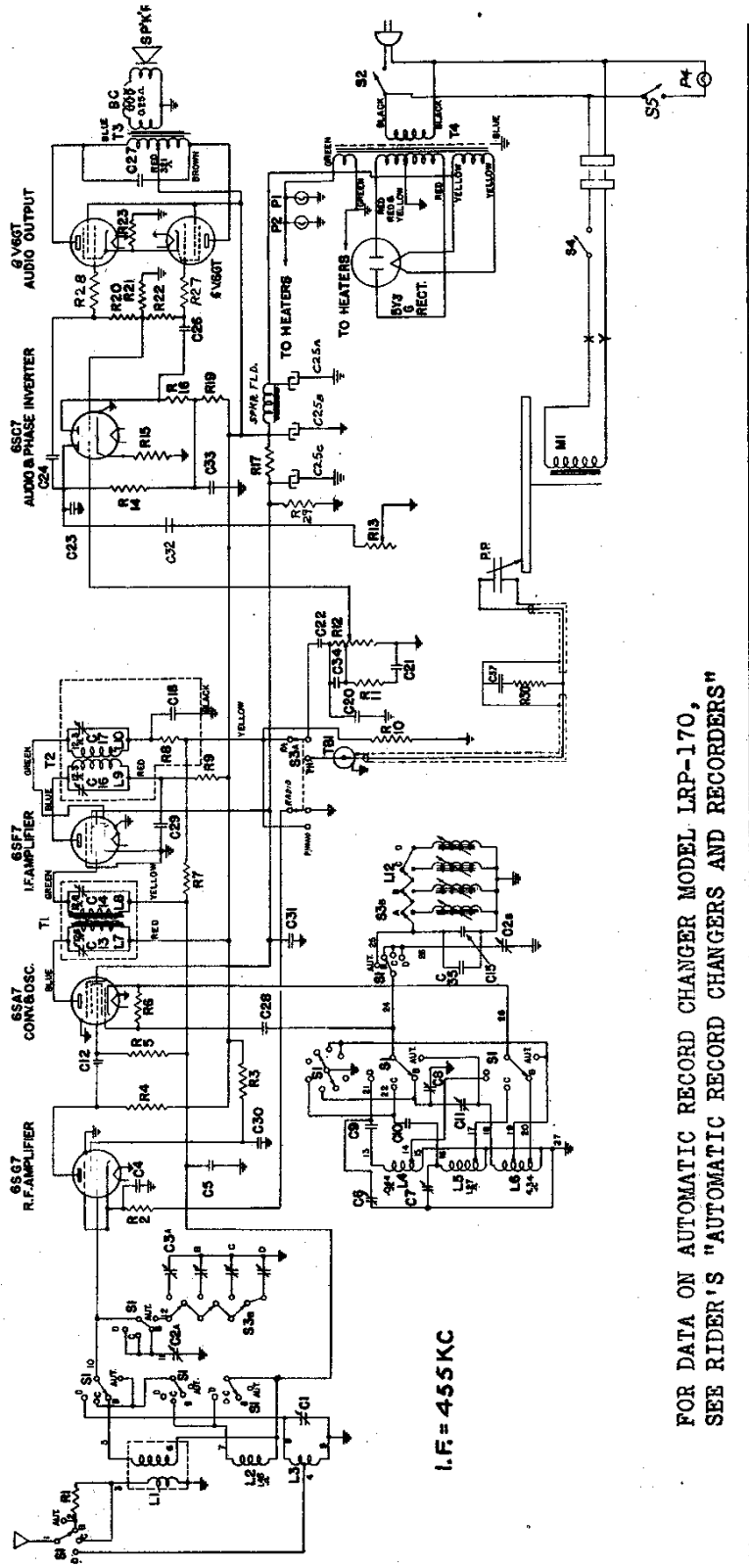
Resources

Riders Volume 14 - GE 14-6

Riders Volume 14 - GE 14-7

MODEL 30
MUSAPHONIC

GENERAL ELECTRIC CO.



FOR DATA ON AUTOMATIC RECORD CHANGER MODEL LRP-170,
SEE RIDER'S "AUTOMATIC RECORD CHANGERS AND RECORDERS"

Symbol	Description
C1	"D" Band trimmer
C2a	Tuning condenser
C2b	
C3a	
C3b	Push-button trimmer strip
C3c	
C3d	
C4	.01 mfd. 600-V paper
C5	.05 mfd. 600-V paper
C6	"B" Band osc. trimmer
C7	"C" Band osc. trimmer
C8	"D" Band osc. trimmer
C9	4700 mmf. ±5% mica
C10	2000 mmf. ±5% mica
C11	"B" padder
C12	100 mmf. mica
C15	600 mmf. silvered mica
C18	200 mmf. mica
C20	100 mmf. mica
C21	.0042 mfd. 600-V paper
C22	.005 mfd. 600-V paper
C23	220 mmf. mica

Symbol	Description
C24	.02 mfd. 600-V paper
C25a	15 mfd. 450-V
C25b	15 mfd. 400-V
C25c	10 mfd. 350-V
C26	.02 mfd. 600-V paper
C27	.002 mfd. 600-V paper
C28	47 mmf. mica
C29	.01 mfd. 600-V paper
C30	.01 mfd. 600-V paper
C31	.01 mfd. 600-V paper
C32	.005 mfd. 600-V paper
C33	.1 mfd. 600-V paper
C34	100 mmf. mica
C35	150 mmf. temp. compensating
C37	.001 mfd. 600-V paper
L1	"B" band loop
L2	"C" RF coil
L3	"D" Band loop
L4	"D" Band osc. coil
L5	"C" Band osc. coil
L6	"B" Band osc. coil

Symbol	Description
L12a	
L12b	
L12c	Push-button coil assembly
L12d	
R1	1000 ohms, ½-watt carbon
R2	220 ohms, ½-watt carbon
R3	47,000 ohms, ½-watt carbon
R4	4700 ohms, ½-watt carbon
R5	47,000 ohms, ½-watt carbon
R6	22,000 ohms, ½-watt carbon
R7	2.2 meg. ½-watt carbon
R8	47,000 ohms, ½-watt carbon
R9	2700 ohms, ½-watt carbon
R10	470,000 ohms, ½-watt carbon
R11	68,000 ohms, ½-watt carbon
R12	2 meg. tap at 1 meg. (volume control)
R13	2 meg. with switch (tone control)
R14	470,000 ohms, ½-watt carbon
R15	3900 ohms, ½-watt carbon
R16	1 meg. ½-watt carbon
R17	12,000 ohms, ½-watt carbon

Symbol	Description
R19	100,000 ohms, ½-watt carbon
R20	330,000 ohms, ½-watt carbon
R21	100,000 ohms, ½-watt carbon
R22	330,000 ohms, ½-watt carbon
R23	220 ohms, 2-watt carbon
R26	470,000 ohms, ½-watt carbon
R27	1000 ohms, ½-watt carbon
R28	1000 ohms, ½-watt carbon
R29	47,000 ohms, 1-watt carbon
R30	180,000 ohms, ½-watt carbon
S1	Band-change switch
S2	Power switch (on tone control)
S3a, S3b	Push-button switch assembly
T1	1st I.F. transformer
T2	2nd I.F. transformer
T3	Output transformer
T4	50–60-cycle power transformer
TB1	Phono-jack
SPKR	12-inch electrodynamic 400-ohm field

GENERAL ELECTRIC CO.

MODEL 30
MUSAPHONIC

The following data is taken with a vacuum-tube voltmeter or similar measuring device.

(1) Stage Gains

Antenna post to RF Grid.....6.5 at 1000 KC
RF Grid to Converter Grid....10 at 1000 KC
Converter Grid to IF Grid.....45 at 1000 KC
Converter Grid to IF Grid.....60 at 455 KC
IF Grid to 6SF7 diode plate...110 at 455 KC

(2) Audio Gains

.09 volts, 400-cycle signal across volume control with control set to maximum will give approximately ½-watt output to speaker.

(3) D-C voltage developed across oscillator-grid resistor R6 averages 7 volts at 1000 KC, 9 volts at 4000 KC, or 6 volts at 10,000 KC.

Variations of ±20% permissible. All readings taken with minus 1½-volt fixed bias on AVC bus.

ALIGNMENT CHART

Step	Test Osc. Connection	Test Osc. Setting	Pointer Setting	Adjust Trimmers
1	6SF7 IF Grid in series with .05 mfd.	455 KC	"BC" Band 550 KC	C17 and C16 for Maximum
2	6SA7 Conv. Grid in series with .05 mfd.	455 KC	"BC" Band 550 KC	C14 and C13 for Maximum
3	Capacity Coupled	580 KC	"BC" Band 580 KC	C11** for Maximum
4	Capacity Coupled	1500 KC	"BC" Band 1500 KC	C8** (Osc.) for Maximum
5	Capacity Coupled	580 KC	"BC" Band 580 KC	C11** for Maximum
6	Capacity Coupled	5 MC	"SW1" Band 5 MC	C7** (Osc.) for Maximum
7	Capacity Coupled	17.8 MC	"SW2" Band 17.8 MC	C6* (Osc.) to signal
8	Capacity Coupled	17.8 MC	"SW2" Band 17.8 MC	C1** (Ant.) for maximum

* Correct peak is at low capacity.

** Rock gang condenser when making alignment.

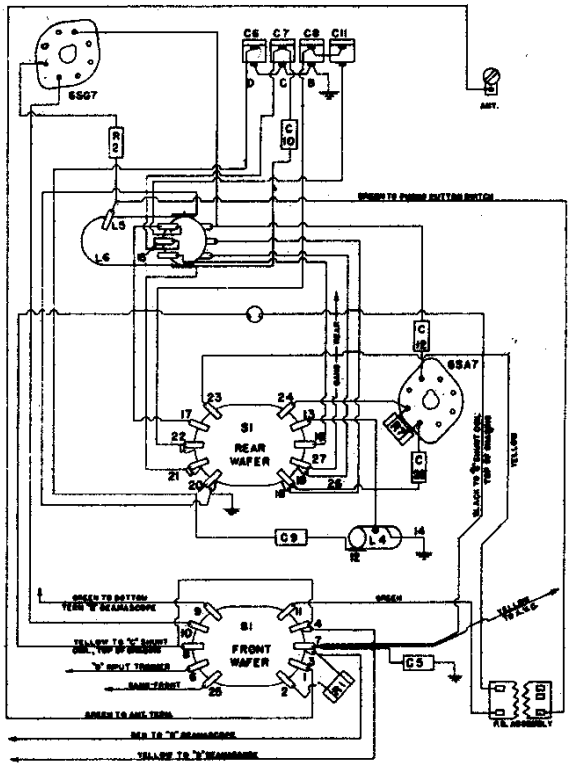
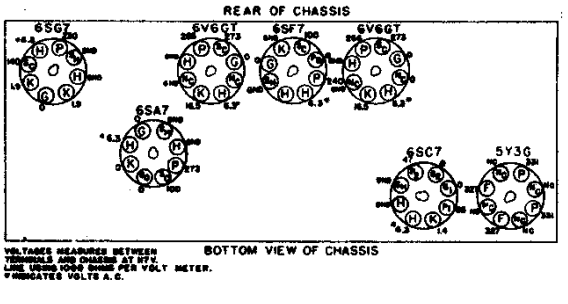


Fig. 2. Switch Wiring



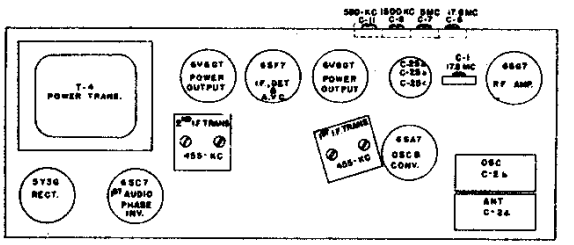


FIG. 5