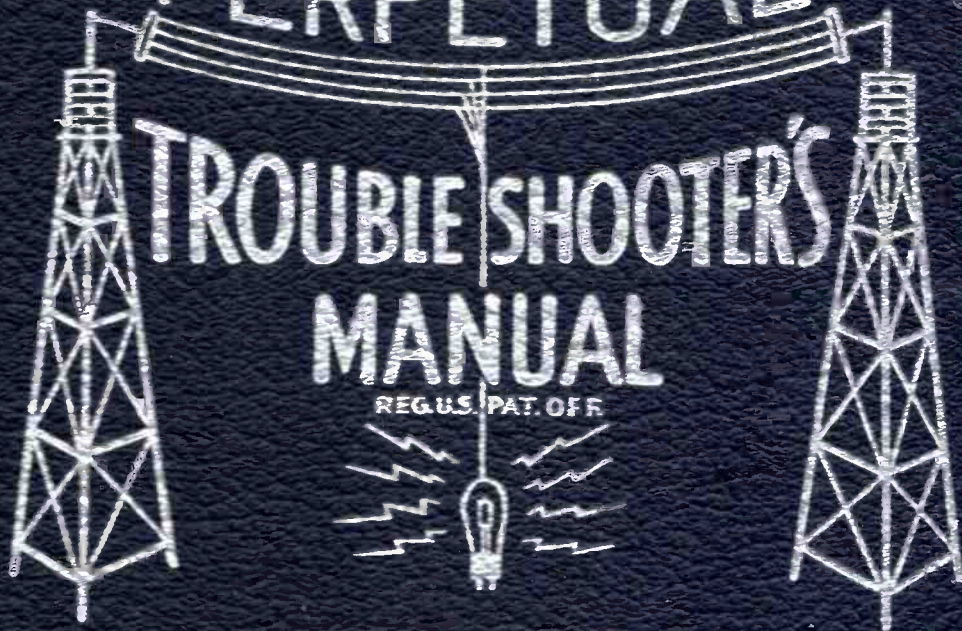


VOLUME XVI

PERPETUAL

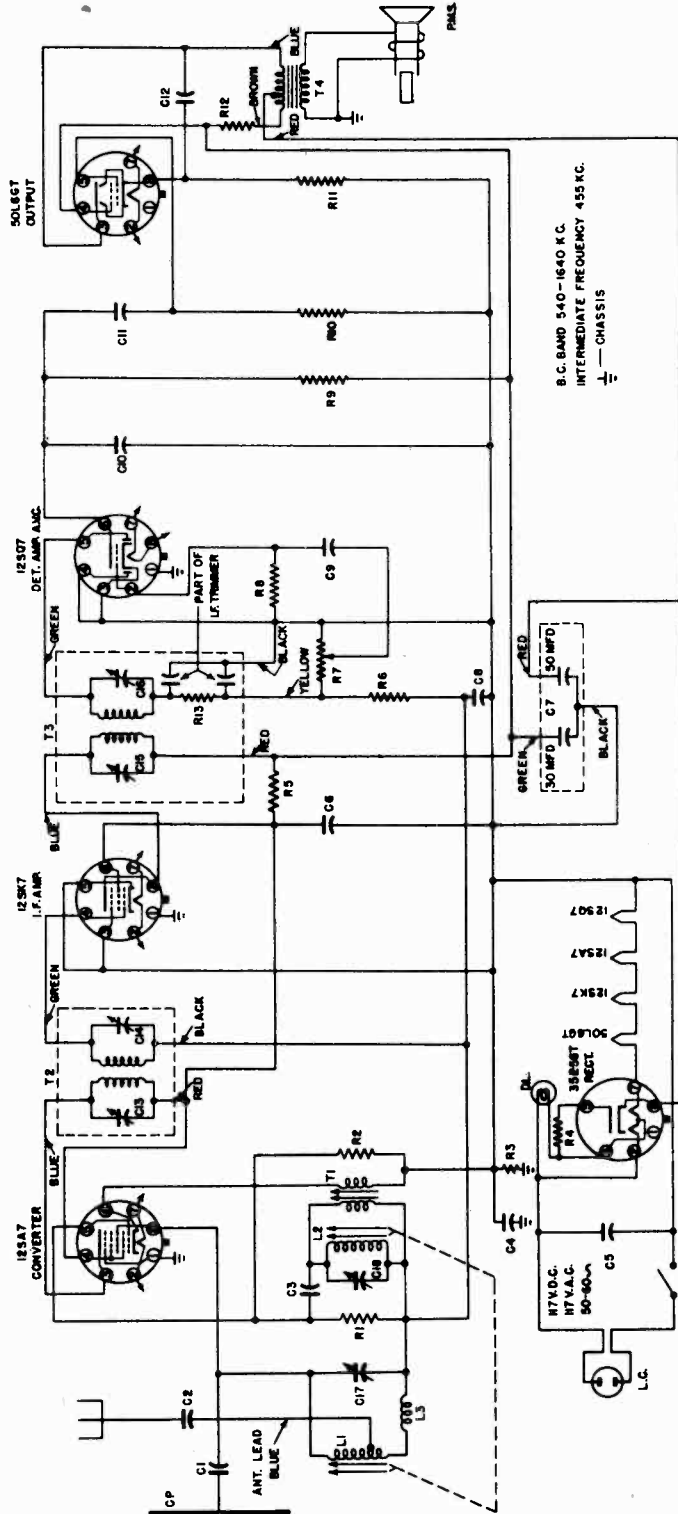


JOHN F. RIDER

LEAR, INC.

MODELS 565, 565BL, 566,  
567, 568

JULY 1, 1946



DESCRIPTION

PART NO.

DWG. SYM.

DESCRIPTION

PART NO.

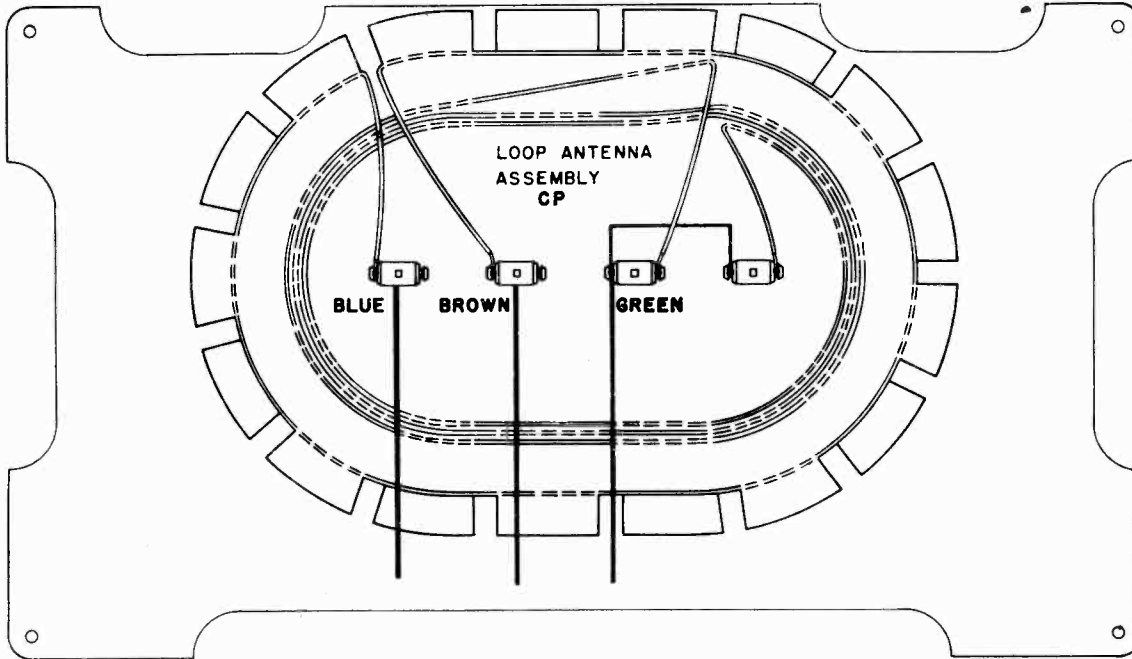
DWG. SYM.

15 meg. $\frac{1}{2}$ w. carbon resistor	55496	R1	15 meg. $\frac{1}{2}$ w. carbon resistor	52370	Antenna Assy. Loop
22,000 ohm $\frac{1}{2}$ w. carbon resistor	55479	R2	22,000 ohm $\frac{1}{2}$ w. carbon resistor	54282	Oscillator Transformer Assy.
55485	R3	T1	220,000 ohm $\frac{1}{2}$ w. carbon resistor	53350	#1 I.F. Transformer Assy.
55460	R4	T2	15 ohm $\frac{1}{2}$ w. carbon resistor	53361	#2 I.F. Transformer Assy.
55475	R5	T3	4,700 ohm $\frac{1}{2}$ w. carbon resistor	52531	Output Transformer
55491	R6	T4	2.2 meg. $\frac{1}{2}$ w. carbon resistor	56053	22 mmfd. Mica Capacitor
56340	R7, S1	C1	500,000 ohm vol. control & line sw.	56055	47 mmfd. Mica Capacitor
55487	R8	C2	2.2 meg. $\frac{1}{2}$ w. carbon resistor	56056	1 mfd. 400 v. Paper Capacitor
55487	R9	C3	470,000 ohm $\frac{1}{2}$ w. carbon resistor	56631	1 mfd. 400 v. Paper Capacitor
55466	R10	C4	470,000 ohm $\frac{1}{2}$ w. carbon resistor	56311	50 - 30 mfd. 150 v. Electrolytic Capacitor
55674	R11	C5	150 ohm $\frac{1}{2}$ w. carbon resistor	56631	.05 mfd. 200 v. Paper Capacitor
55481	R12	C6	1,200 ohm $\frac{1}{2}$ w. carbon resistor	56600	.02 mfd. 200 v. Paper Capacitor
L1, L2	R13	C7	47,000 ohm $\frac{1}{2}$ w. carbon resistor	56596	220 mmfd. Mica Capacitor
L3, C10	L1, L2	C8	Slugg inductor & pulley Assy.	56059	.04 mfd. 200 v. Paper Capacitor
L.C.	C11	C9	Line cord	56532	.05 mfd. 400v. Paper Capacitor
P.L.C.	C12	C10	Dial light, type 47	56528	#1 I.F. Trimmers (Part of Assy.)
P.M.S.	C13, C14	C11	5" Permanent magnet speaker	56528	#2 I.F. Trimmers (Part of Assy.)
	C15, C16	C12			

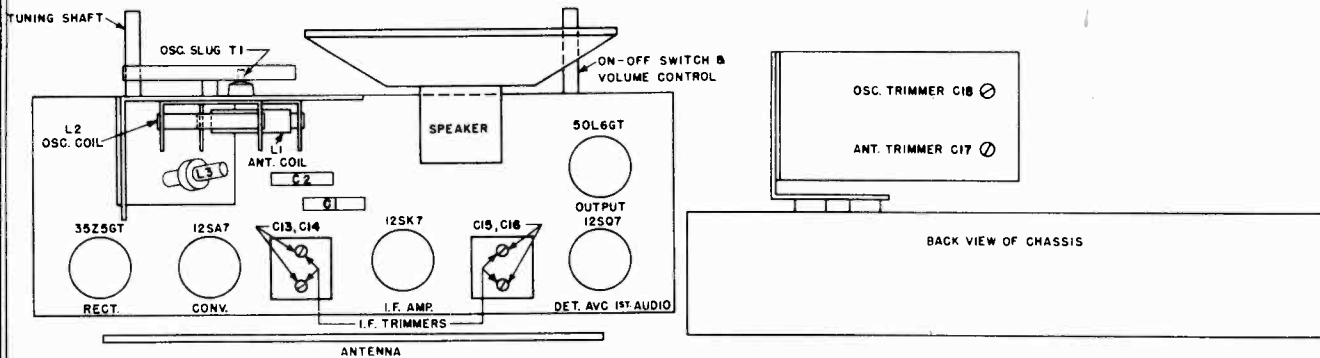
MODELS 565, 565BL, 566,  
567, 568

LEAR, INC.

LOOP WIRING DIAGRAM



CHASSIS DIAGRAMS



ALIGNMENT CHART

OPERATION	ALIGNMENT OF	GENERATOR CONNECTED TO	DUMMY ANTENNA	GENERATOR FREQUENCY	DIAL SETTING	TRIMMER	REMARKS
1	Set dial pointer at 1620 KC with tuning unit drive turned fully clockwise against stop.						
2	2nd IF	Pin No. 8 of 12SA7 and B-	.05 mf.	455 KC	1620 KC	C15, 16	Max. Output
3	1st IF					C13, 14	Max. Output
4	Osc. Trim	Antenna lead (blue wire) and B-	200 mmf.	1620 KC	1620 KC	C18	Max. Output
5	Ant. Trim			1500 KC	1500 KC	C17	Max. Output
6	Osc. Slug			600 KC	600 KC	T1	Max. Output*
7	Repeat adjustments in operations 5 and 6 until no further increase in output is obtained.						

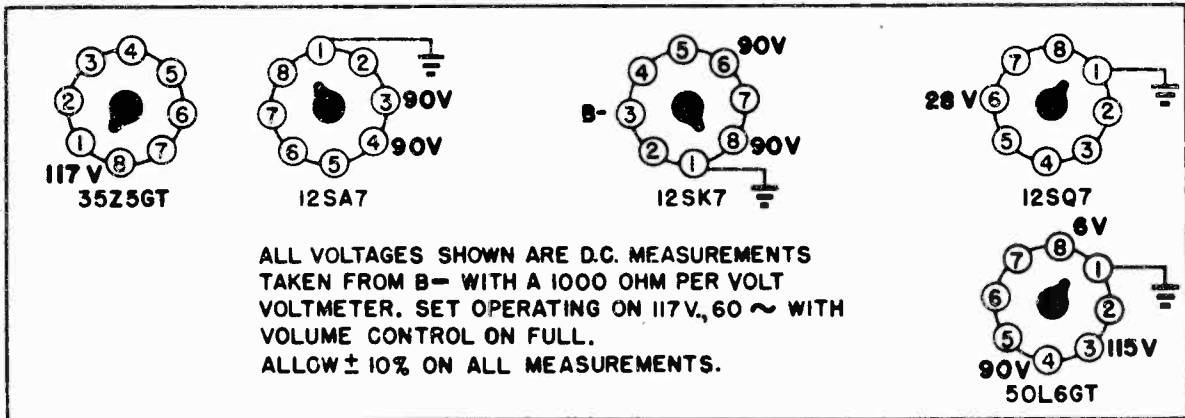
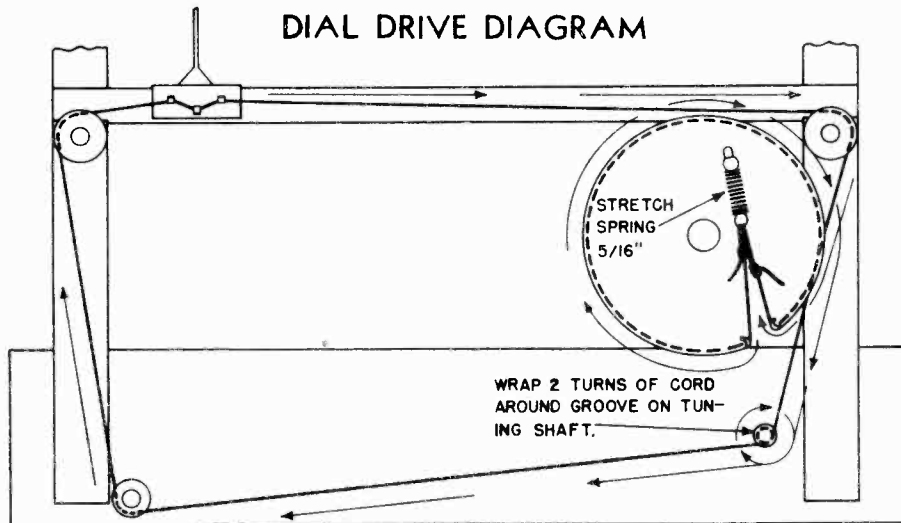
\* Rock dial tuner slightly while adjusting

Notes: Connect output meter to voice coil circuit.  
Volume control on full for all adjustments.  
Signal generator gain control at minimum for satisfactory output meter reading.

MODELS 565, 565BL, 566,  
567, 568

LEAR, INC.

DIAL DRIVE DIAGRAM



TUNING SHAFT

BOTTOM VIEW OF CHASSIS

ON-OFF SWITCH & VOLUME CONTROL

VOLTAGE CHART

Line voltage: 117 volts, 60 cycles (AC)

Position of volume control: On full (with no signal)

TUBE	FUNCTION	voltage of each socket prong to B- (Prong No. 3 of 12SK7)							
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
12SA7	Oscillator - Converter	0	-	90	90	0	0	-	0
12SK7	I-F Amplifier	0	-	0	0	0	90	-	90
12SQ7	Detector - AVC - 1st. Audio	0	0	0	0	0	28	-	-
50L6	Beam Power Amplifier	0	-	115	90	0	0	-	6
35Z5	Rectifier	-	-	-	-	110 AC	-	-	117

Notes: voltage readings are for schematic diagram in this bulletin. Allow 10% ± on all measurements. Always use meter scale which will give greatest deflection within scale limits. All DC measurements made with 1000 ohms per volt voltmeter. voltages are DC unless otherwise specified. All voltages measured from prong No. 3 of 12SK7 tube socket, or B-.

MODELS 662, 663, 665, 6618

LEAR, INC.

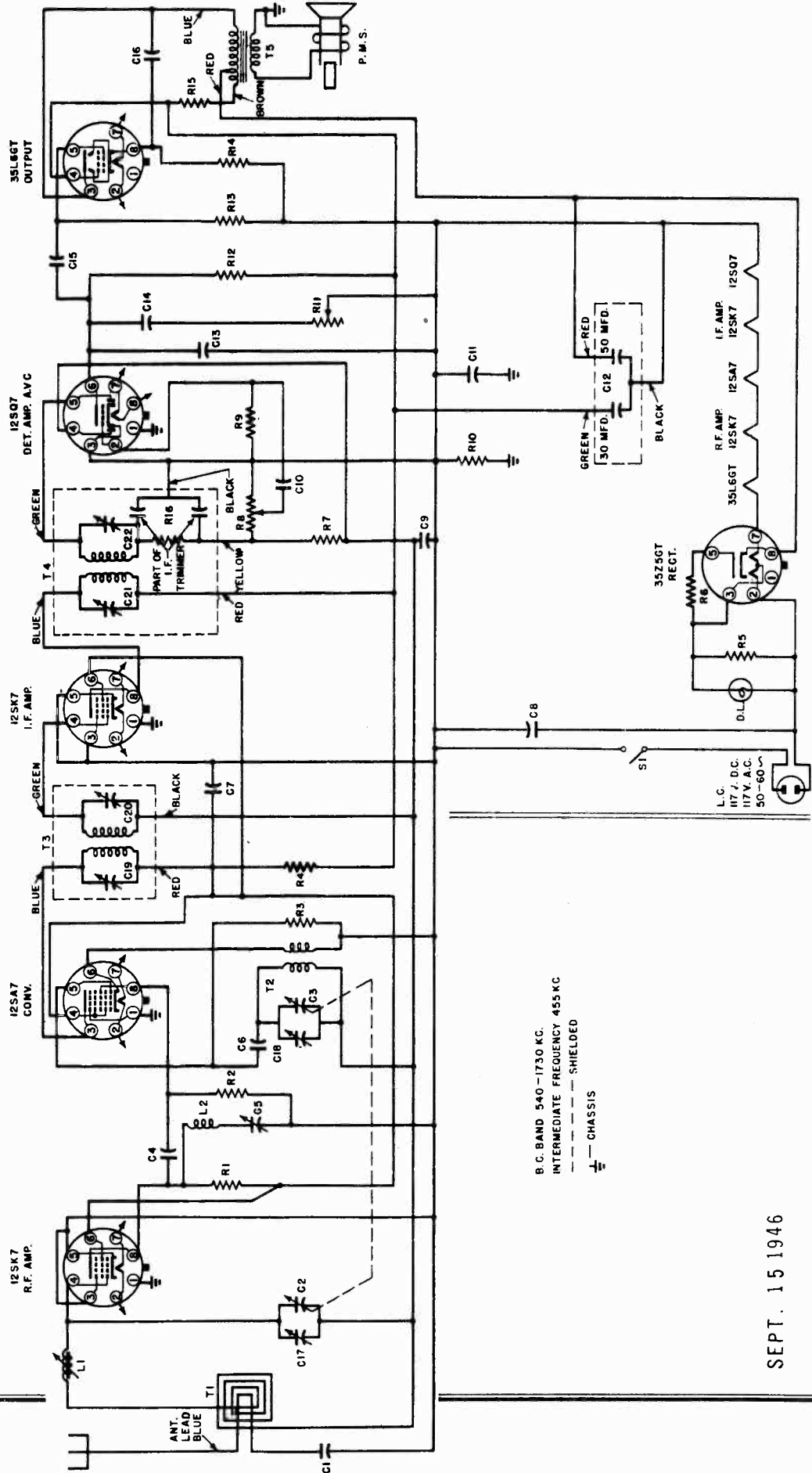
55494	6.8 MEG.	1/2W. CARBON RESISTOR
55485	220,000 OHM	"
56339	500,000	" TONE CONTROL
55487	470,000	" 1/2W. CARBON RESISTOR
55487	470,000	"
55486	150	"
55840	1200	" 2W.
55841	47,000	" ART. LOAD COIL
56897	"	" R.F. WAVE TRAP
65016	"	" LINE CORD
93091	"	" DIAL LIGHT, TYPE 47
70535	"	" 5" PERMANENT MAGNET SPEAKER
53450	"	" P.M.S.

56805	.2 MFD.	200V PAPER CAPACITOR
56856	.05	" 600V
56800	"	" 200V
56896	.02	" 400V
56891	.1	" 400V
52326	30-50 MMFD.	150V. ELECTROLYTIC
56009	220 MMFD.	MICA PAPER CAPACITOR
56642	.005 MMFD.	600V. PAPER CAPACITOR
56389	.004	" 200V.
56628	.05	" 400V.
OSC.	"	" OSC. TRIMMER ON VARIABLE
NO.1 L.F.	"	" TRIMMERS (PART OF ASSY.)
C18,C20	"	" NO.1 L.F. TRIMMERS (PART OF ASSY.)

C7	NO.2 I.F. TRIMMERS (PART OF ASSY.)
C8	4,700 OHM 1/2W CARBON RESISTOR
C9	220,000
C10	22,000 OHM
C11	470
C12	150
C13	15
C14	2.2 MEG.
C15	500,000 OHM VOL. CONTROL & LINE SW.

12SK7	R.F. AMP.
12SA7	CONV.
12SK7	I.F. AMP.
12SK7	DET. AMP. AVC
35L6GT	OUTPUT

ALT. INDICATES ALTERNATE PART NO.



B.C. BAND 540-1730 KC.  
 INTERMEDIATE FREQUENCY 455 KC  
 --- SHIELDED  
 --- CHASSIS

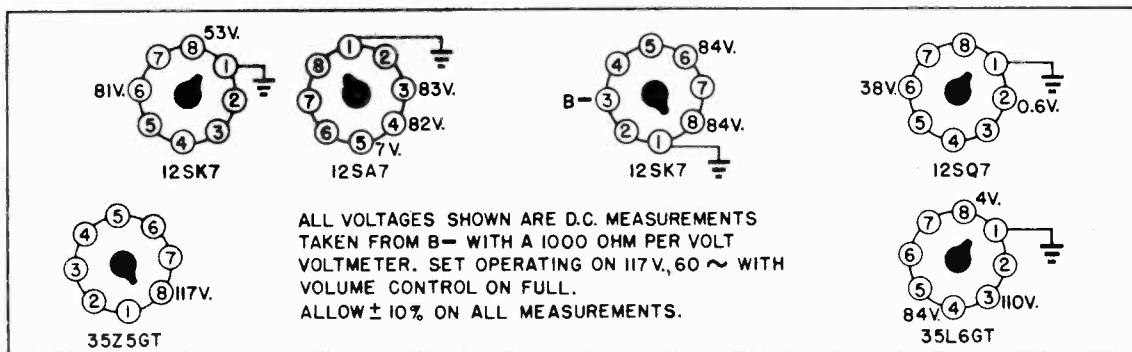
SEPT. 15 1946

LEAR, INC.

MODELS 662,663,665,6618  
MODEL 6617PC

MODELS 662,663,665,6618

CHASSIS VOLTAGE CHART



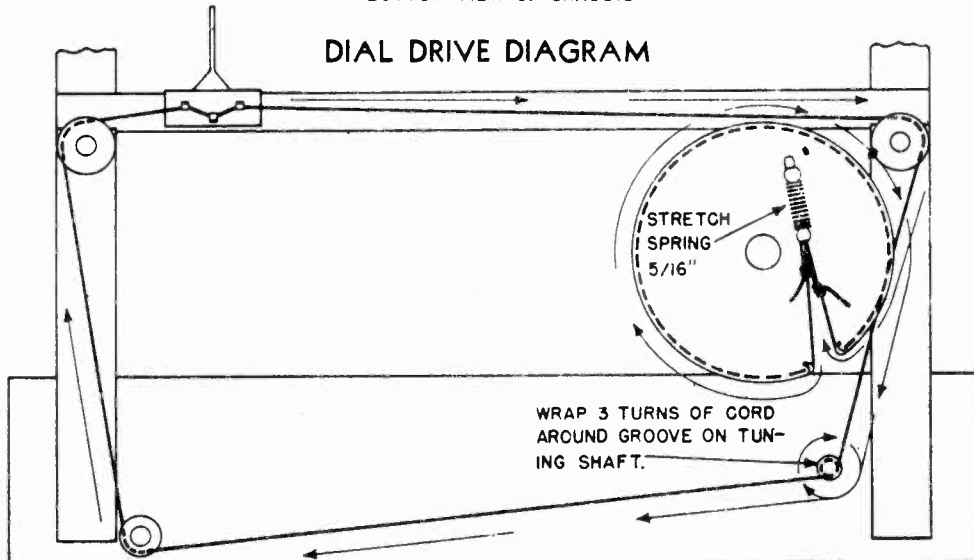
TUNING SHAFT

TONE CONTROL

ON-OFF SWITCH & VOLUME CONTROL

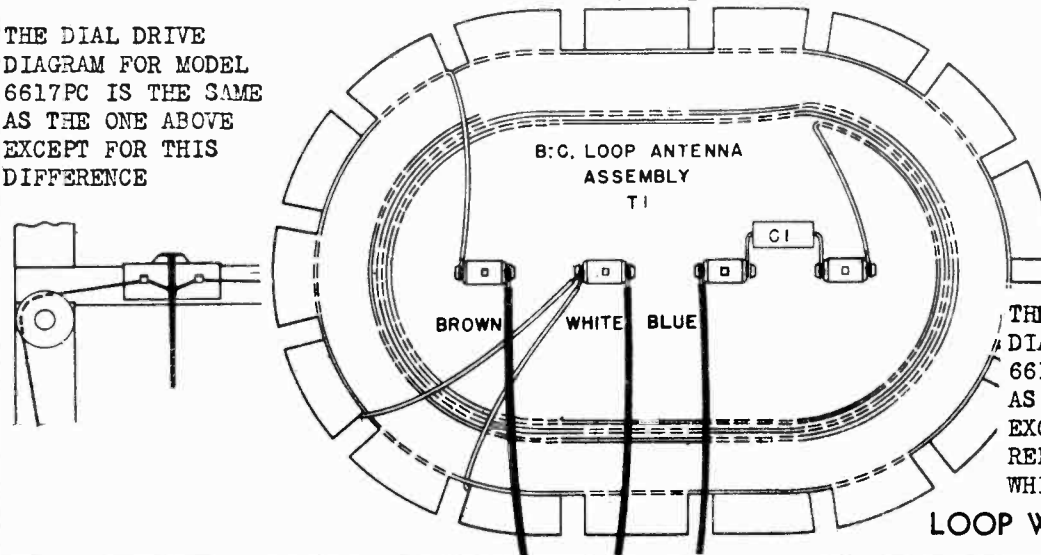
BOTTOM VIEW OF CHASSIS

DIAL DRIVE DIAGRAM



FRONT VIEW

THE DIAL DRIVE DIAGRAM FOR MODEL 6617PC IS THE SAME AS THE ONE ABOVE EXCEPT FOR THIS DIFFERENCE

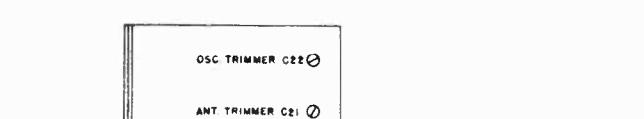
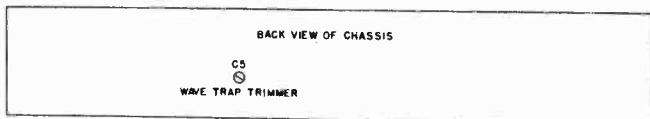
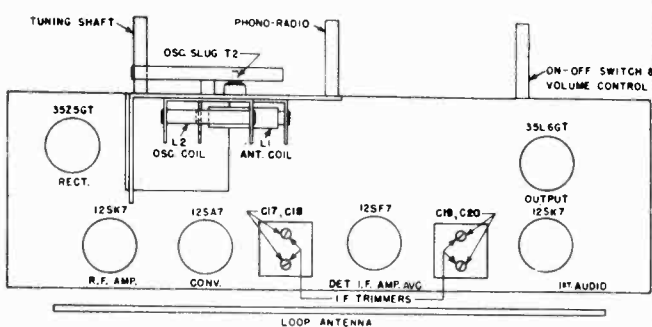
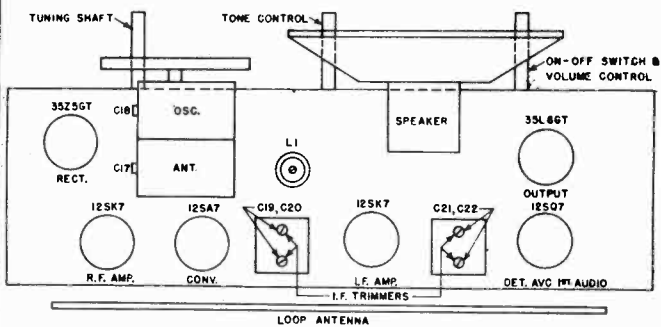


THE LOOP WIRING DIAGRAM FOR MODEL 6617PC IS THE SAME AS THE ONE ON THE LEFT EXCEPT THAT BROWN IS REPLACED BY WHITE AND WHITE BY BROWN

LOOP WIRING DIAGRAM

MODELS 662,663,665,6618  
MODEL 6617PC

LEAR INC.



MODELS 662,663,665,6618

MODEL 6617PC

ALIGNMENT CHART MODELS 662,663,665,6618

OPERATION	ALIGNMENT OF	GENERATOR CONNECTED TO	DUMMY ANTENNA	GENERATOR FREQUENCY	DIAL AND CONDENSER SETTING	TRIMMER	REMARKS
1	Set dial pointer to last mark at low frequency end of dial with gong condenser closed						
2	2nd IF	Pin No. 8 of 12SA7 and B-	.05mf.	455 KC	open	C21, C22	Max. Output
3	1st IF					C19, C20	Max. Output
4	Wave trap	Antenna lead (Blue wire) and B-	200 mmf.	455 KC	open	C5	Max. Output
5	Osc. trim.			1500 KC	1500 KC	C18	Max. Output
6	Ant. trim.			1500 KC	1500 KC	C17	Max. Output
7	Load Coil			600 KC	600 KC	Slug in L1	Max. Output
8	Repeat adjustments in operations 5 and 6 until no further increase in output is obtained.						

Notes: Connect output meter to voice coil circuit.  
Volume control on full for all adjustments.  
Signal generator gain control at minimum for satisfactory output meter reading.

ALIGNMENT CHART MODEL 6617PC

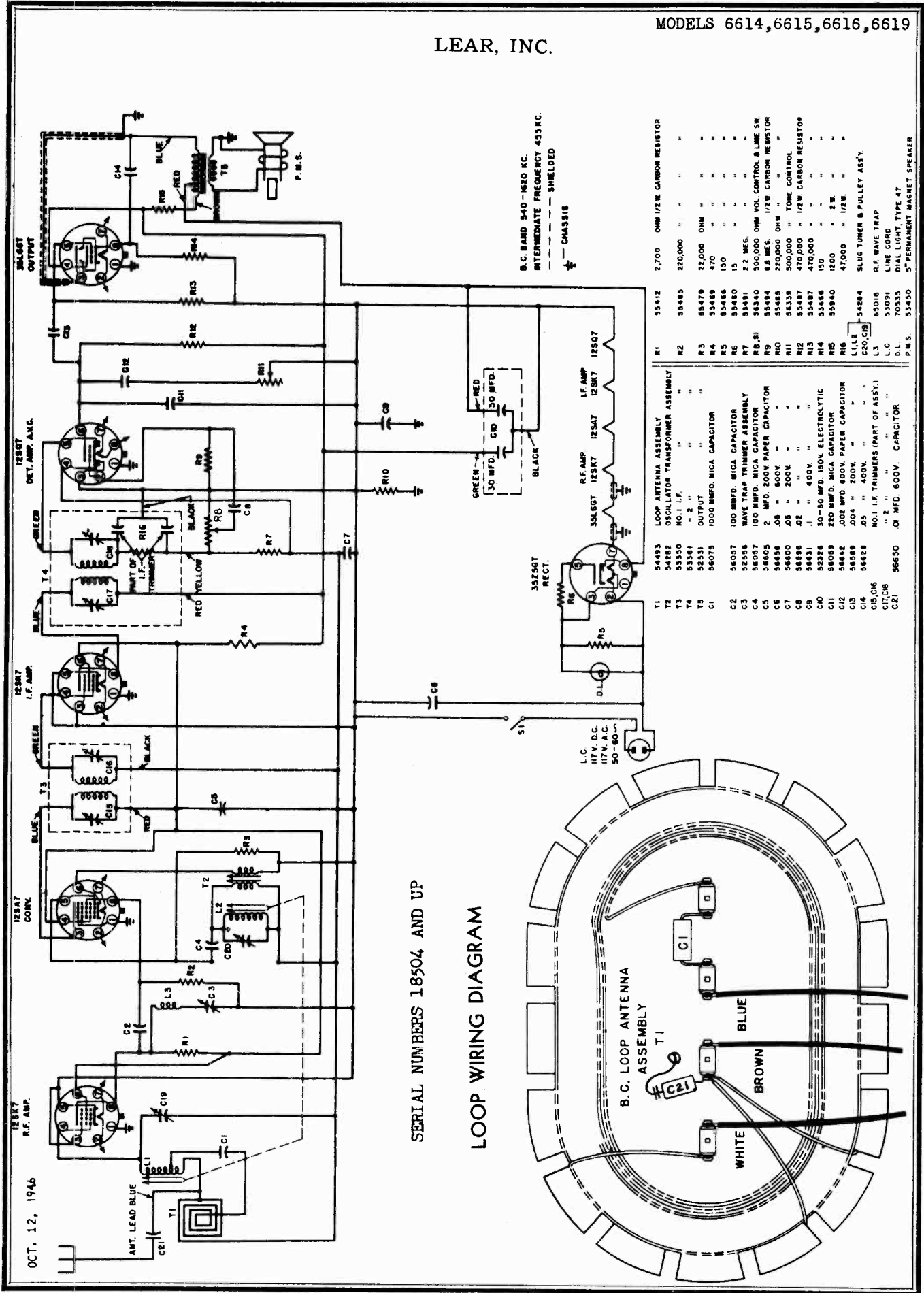
OPERATION	ALIGNMENT OF	GENERATOR CONNECTED TO	DUMMY ANTENNA	GENERATOR FREQUENCY	DIAL SETTING	TRIMMER	REMARKS
1	Set dial pointer at 1620 KC with tuning unit drive turned fully clockwise against stop.						
2	2nd IF	Pin No. 8 of 12SA7 and B-	.05 mf.	455 KC	1620 KC	C19, C20	Max. Output
3	1st IF					C17, C18	Max. Output
4	Wave Trap	Antenna lead (blue wire) and B-	200 mmf.	455 KC	1620 KC	C3	Min. Output
5	Osc. Trim			1620 KC	1620 KC	C22	Max. Output
6	Ant. Trim			1500 KC	1500 KC	C21	Max. Output
7	Osc. Slug			600 KC	600 KC	T2	Max. Output*
8	Repeat adjustments in operations 5 and 6 until no further increase in output is obtained.						

\* Rock dial tuner slightly while adjusting T2.

Notes: Connect output meter to voice coil circuit.  
Volume control on full for all adjustments.  
Signal generator gain control at minimum for satisfactory output meter reading.

LEAR, INC.

MODELS 6614, 6615, 6616, 6619



SERIAL NUMBERS 18504 AND UP

LOOP WIRING DIAGRAM

