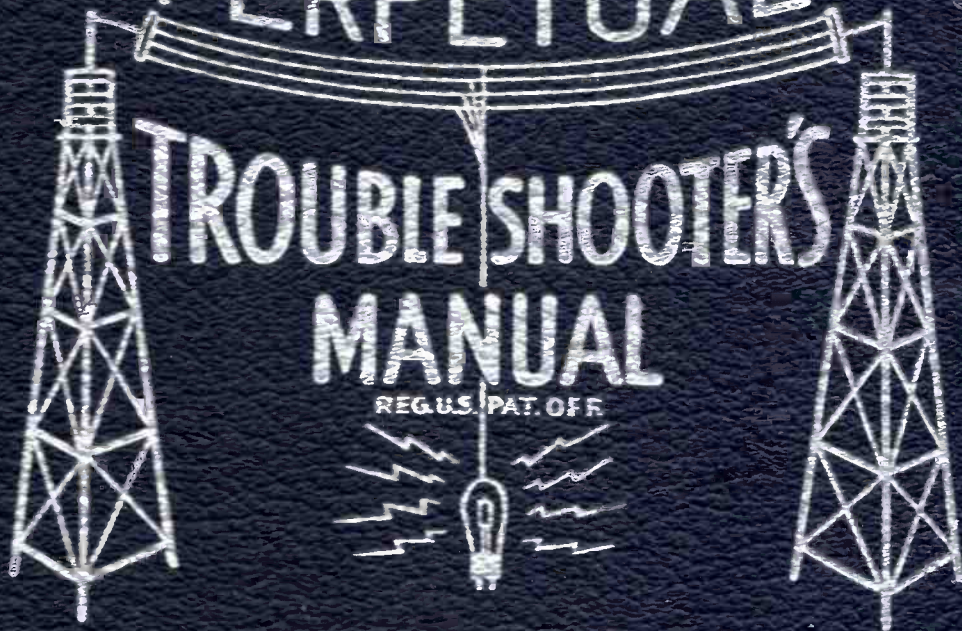


VOLUME XVI

PERPETUAL

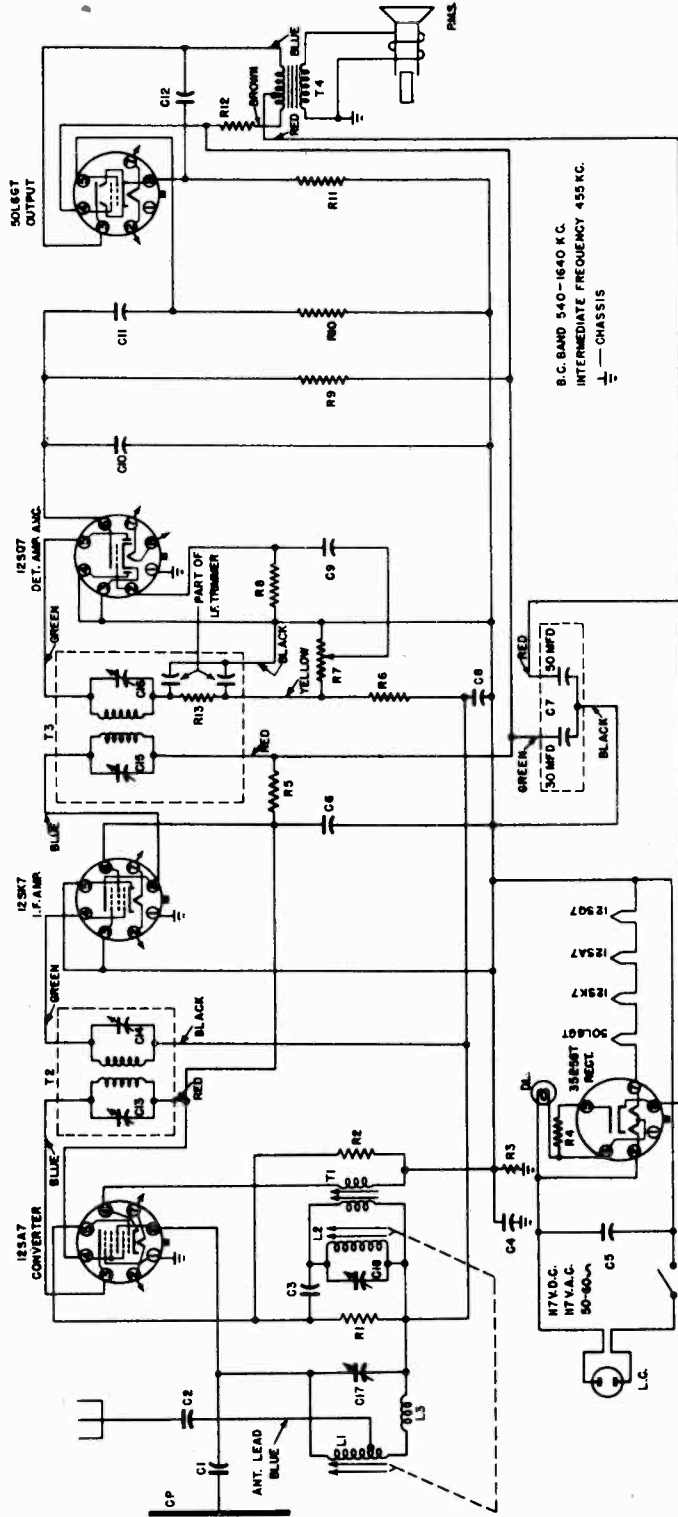


JOHN F. RIDER

LEAR, INC.

MODELS 565, 565BL, 566,  
567, 568

JULY 1, 1946



DESCRIPTION

PART NO.

DWG. SYM.

DESCRIPTION

PART NO.

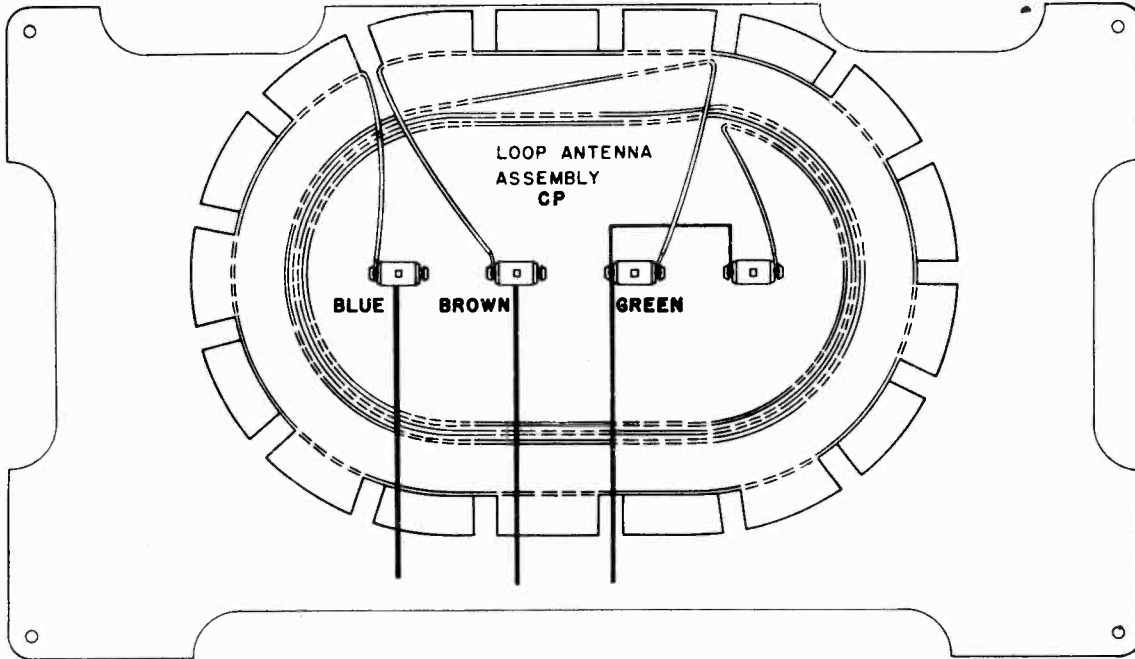
DWG. SYM.

DWG. SYM.	PART NO.	DESCRIPTION
R1	55496	15 meg. $\frac{1}{2}$ w. carbon resistor
R2	55479	22,000 ohm $\frac{1}{2}$ w. carbon resistor
R3	55485	220,000 ohm $\frac{1}{2}$ w. carbon resistor
R4	55460	15 ohm $\frac{1}{2}$ w. carbon resistor
R5	55475	4,700 ohm $\frac{1}{2}$ w. carbon resistor
R6	55491	2.2 meg. $\frac{1}{2}$ w. carbon resistor
R7, S1	56340	500,000 ohm vol. control & line sw.
R8	55491	2.2 meg. $\frac{1}{2}$ w. carbon resistor
R9	55487	470,000 ohm $\frac{1}{2}$ w. carbon resistor
R10	55487	470,000 ohm $\frac{1}{2}$ w. carbon resistor
R11	55466	150 ohm $\frac{1}{2}$ w. carbon resistor
R12	55674	1,200 ohm $\frac{1}{2}$ w. carbon resistor
R13	55481	47,000 ohm $\frac{1}{2}$ w. carbon resistor
L1, L2	54284	Slug tuner & pullly assy.
C17, C18	53385	Antenna loading coil
L.C.	53091	Line cord
D.C.	70525	Dial light, type 47
P.M.S.	33450	5" Permanent magnet speaker
C1	52370	Antenna Assy. LOOP
T1	54282	Oscillator Transformer Assy.
T2	53350	#1 I.F. Transformer Assy.
T3	53361	#2 I.F. Transformer Assy.
T4	52531	Output Transformer
C1	56053	22 mmfd. Mica Capacitor
C2	56053	22 mmfd. Mica Capacitor
C3	56055	47 mmfd. Mica Capacitor
C4	56056	1 mfd. 400 v. Paper Capacitor
C5	56056	.05 mfd. 200 v. Paper Capacitor
C6	56631	50 - 30 mfd. 150 v. Electrolytic Capacitor
C7	52326	.05 mfd. 200 v. Paper Capacitor
C8	56600	220 mmfd. Mica Capacitor
C9	56596	.04 mfd. 200 v. Paper Capacitor
C10	56059	.05 mfd. 400v. Paper Capacitor
C11	56539	.05 mfd. 400v. Paper Capacitor
C12	56628	#1 I.F. Trimmers (Part of assy.)
C13, C14		#2 I.F. Trimmers (Part of assy.)

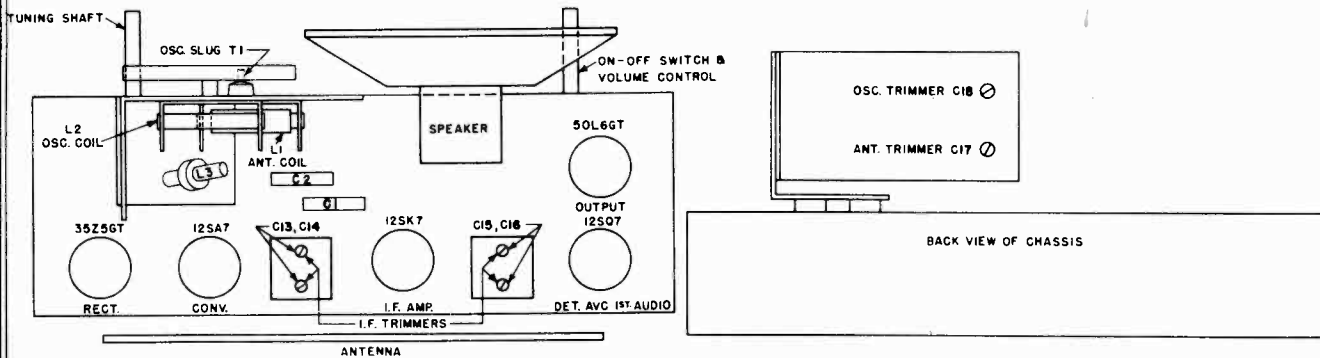
MODELS 565, 565BL, 566,  
567, 568

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.						

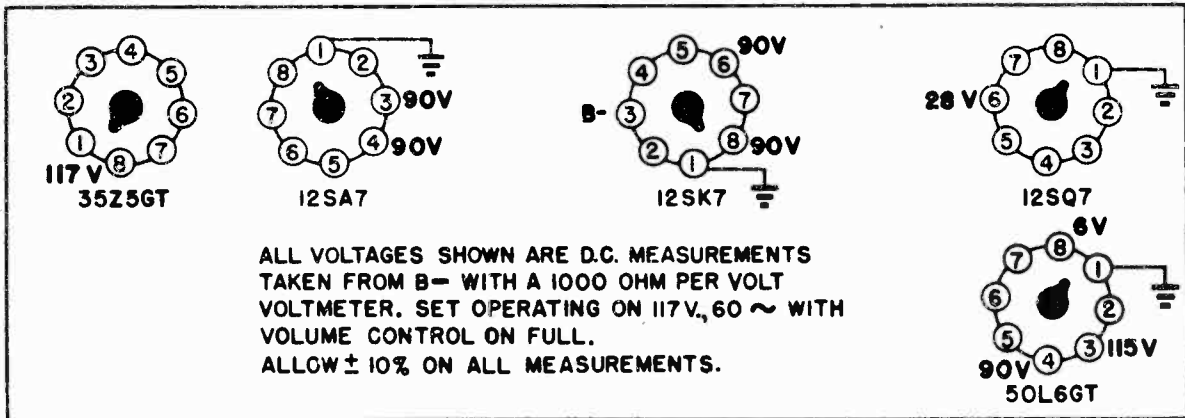
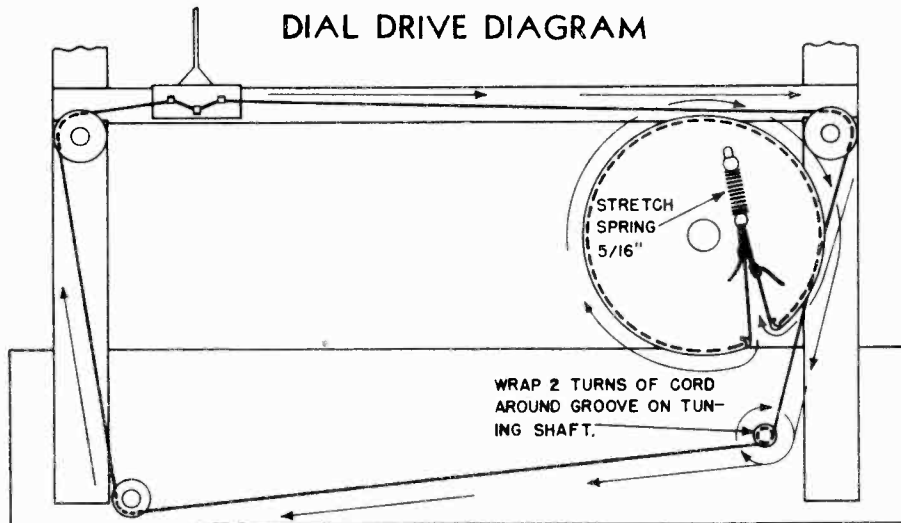
\* Rock dial tuner slightly while adjusting

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

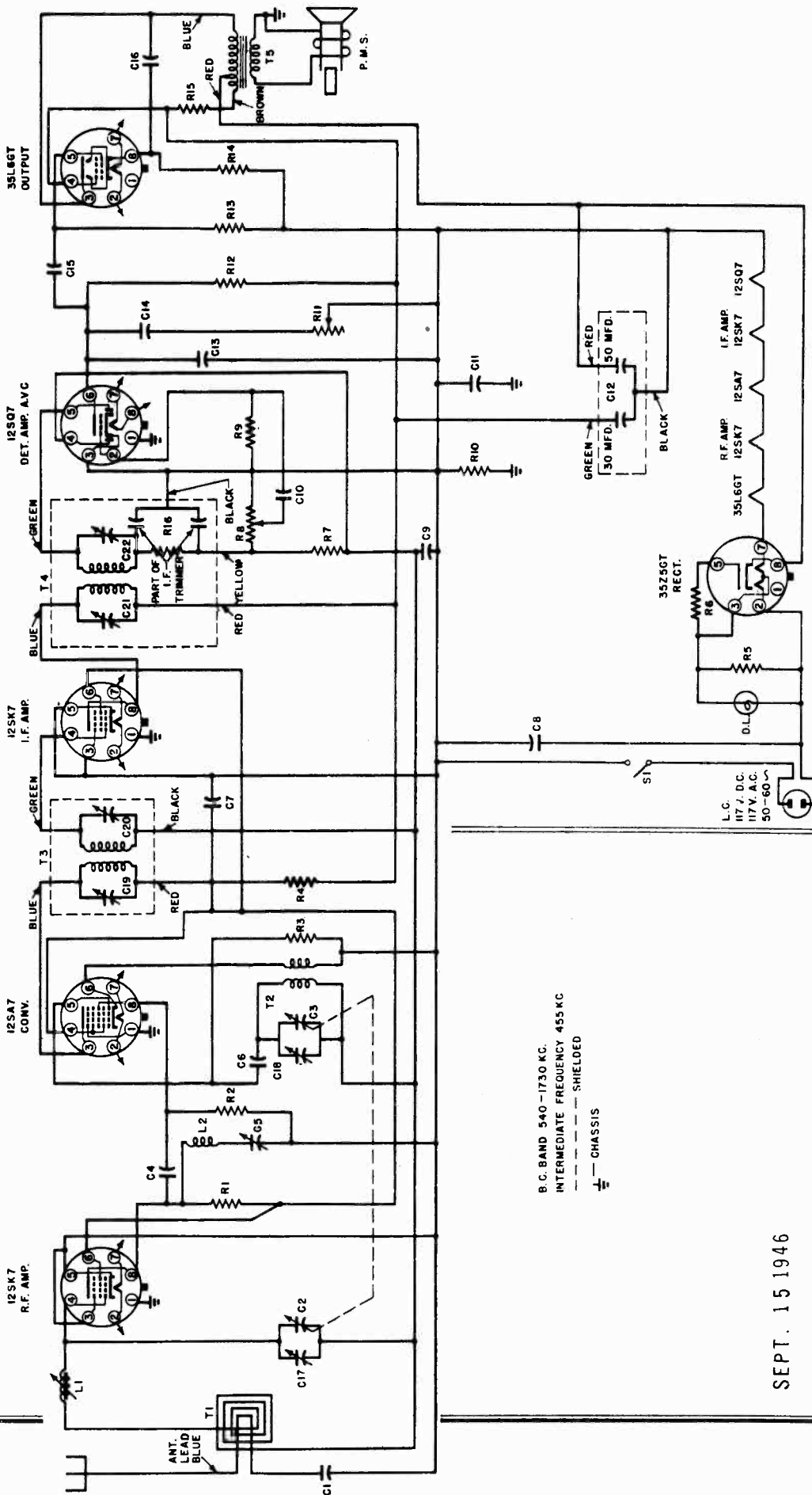
Notes: voltage readings are for schematic diagram in this bulletin. Allow 10% ± on all measurements. Always use meter scale which will give greatest deflection within scale limits. All DC measurements made with 1000 ohms per volt voltmeter. voltages are DC unless otherwise specified. All voltages measured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

MODELS 662, 663, 665, 6618

LEAR, INC.

DWG. SYM.	PART NO.	DESCRIPTION	DWG. SYM.	PART NO.	DESCRIPTION	DWG. SYM.	PART NO.	DESCRIPTION
T1	52570	LOOP ANTENNA ASSEMBLY	R1	55425	NO.2 I.F. TRIMMERS (PART OF ASSY.)	C7	56805	.2 MFD. 200V PAPER CAPACITOR
T2	51337	OSCILLATOR COIL	R2	55485	"	C8	56856	.05 " 600V "
T3	51330	NO.1 I.F. TRANSFORMER	R3	55479	"	C9	56800	.05 " 200V "
T4	53361	" 2 "	R4	55469	"	C10	56896	.02 " 400V "
T5	52331	OUTPUT	R5	55466	"	C11	56891	.1 " 400V "
C1	56985	.001 MFD. 200V. PAPER CAPACITOR	R6	55460	"	C12	52326	30-50 MFD. 150V. ELECTROLYTIC
C2	52452	2 G-NG VARIABLE CAPACITOR & PULLEY	R7	55491	"	C13	56009	220 MMFD. MICA CAPACITOR
C3	(ALT) 60837	"	R8	56340	500,000 OHM VOL. CONTROL & LINE SW.	C14	56642	.005 MFD. 600V. PAPER CAPACITOR
C4	58057	100 MMFD. MICA CAPACITOR	R9	56628	"	C15	56389	.004 " 200V. "
C5	52556	WAVE TRAP TRIMMER ASSEMBLY	R10	56807	"	C16	56897	.05 " 400V. "
C6	56057	100 MMFD. MICA CAPACITOR	R11	56807	"	L1	56016	R.F. WAVE TRAP
			R12	56807	"	L2	53091	LINE CORD
			R13	56807	"	D.L.	70535	DIAL LIGHT, TYPE 47
			R14	56807	"	P.M.S.	53450	5" PERMANENT MAGNET SPEAKER

ALT. INDICATES ALTERNATE PART NO.



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

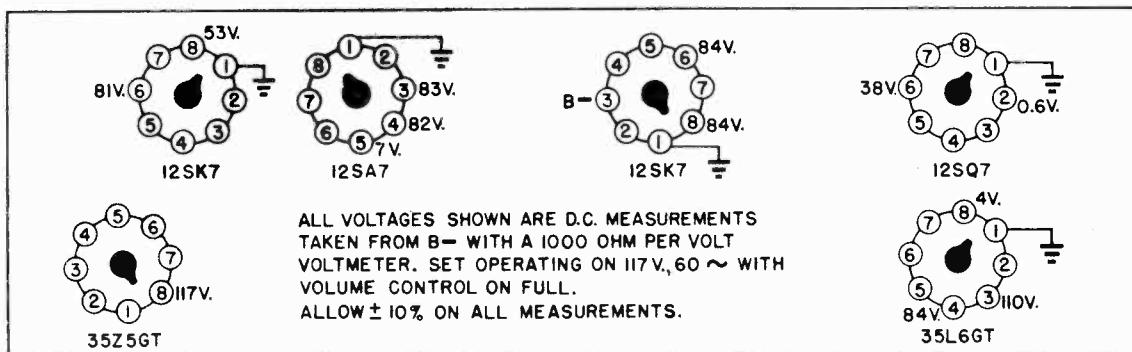
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MODELS 662,663,665,6618  
MODEL 6617PC

MODELS 662,663,665,6618

CHASSIS VOLTAGE CHART



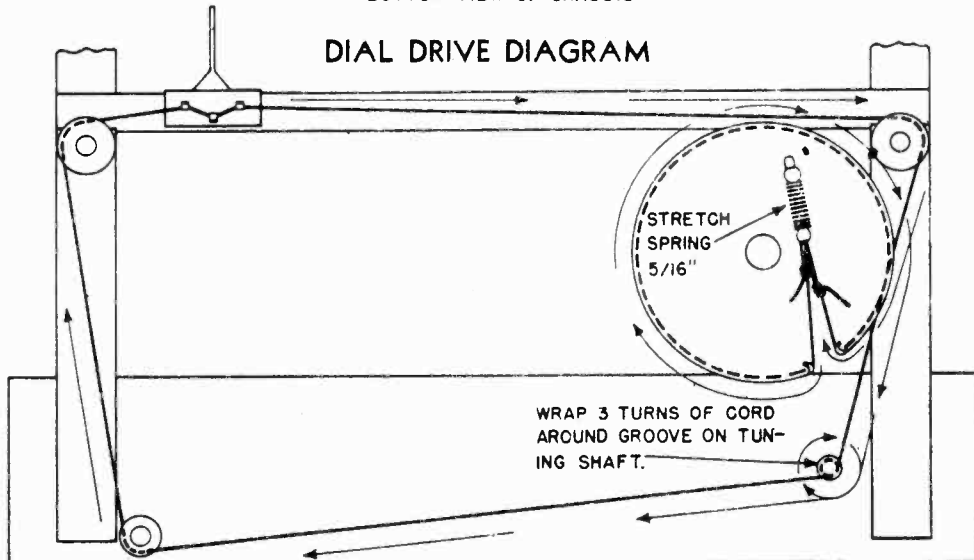
TUNING SHAFT

TONE CONTROL

ON-OFF SWITCH & VOLUME CONTROL

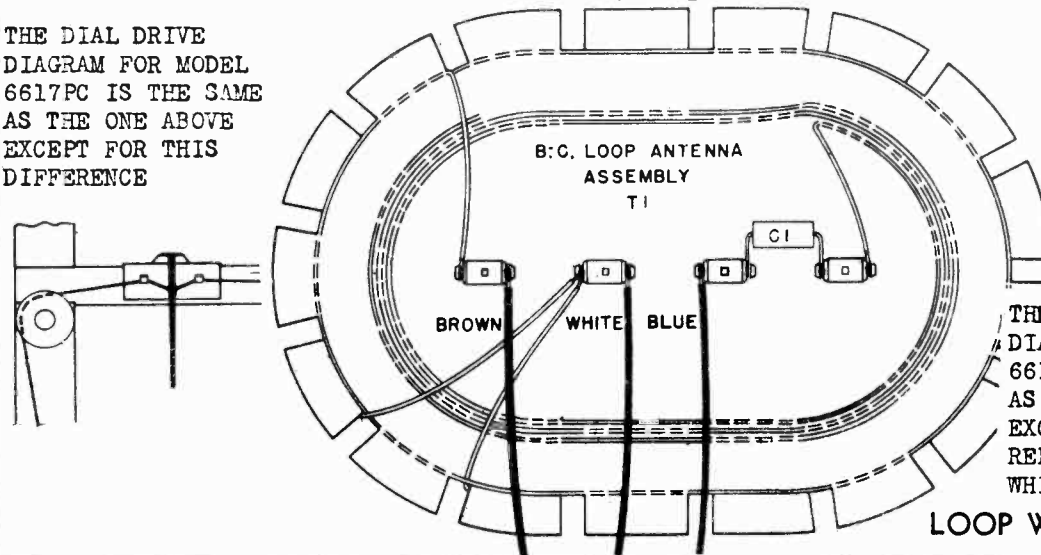
BOTTOM VIEW OF CHASSIS

DIAL DRIVE DIAGRAM



FRONT VIEW

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

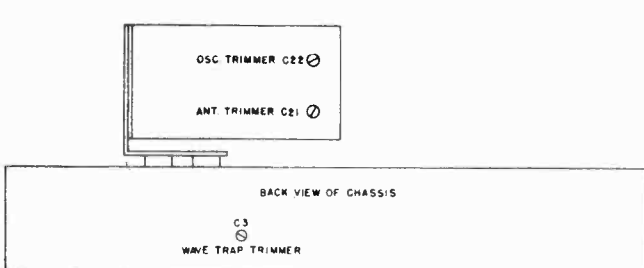
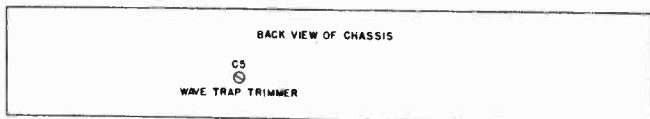
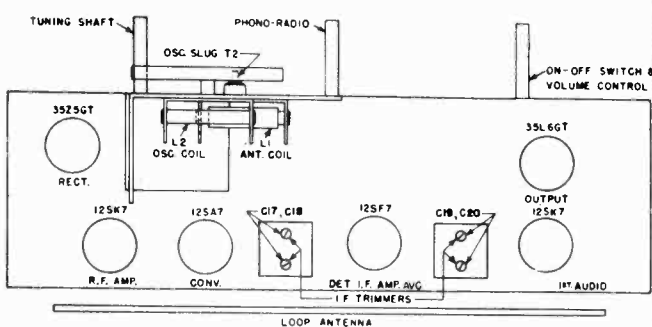
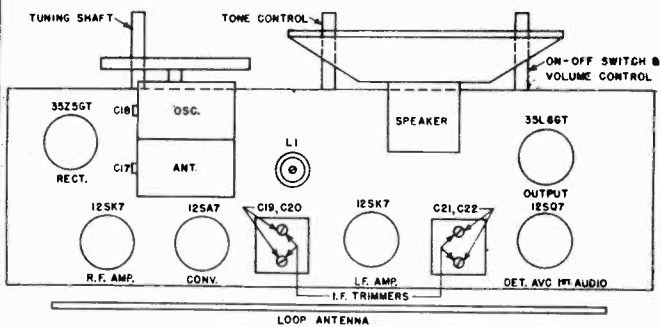


THE LOOP WIRING DIAGRAM FOR MODEL 6617PC IS THE SAME AS THE ONE ON THE LEFT EXCEPT THAT BROWN IS REPLACED BY WHITE AND WHITE BY BROWN

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

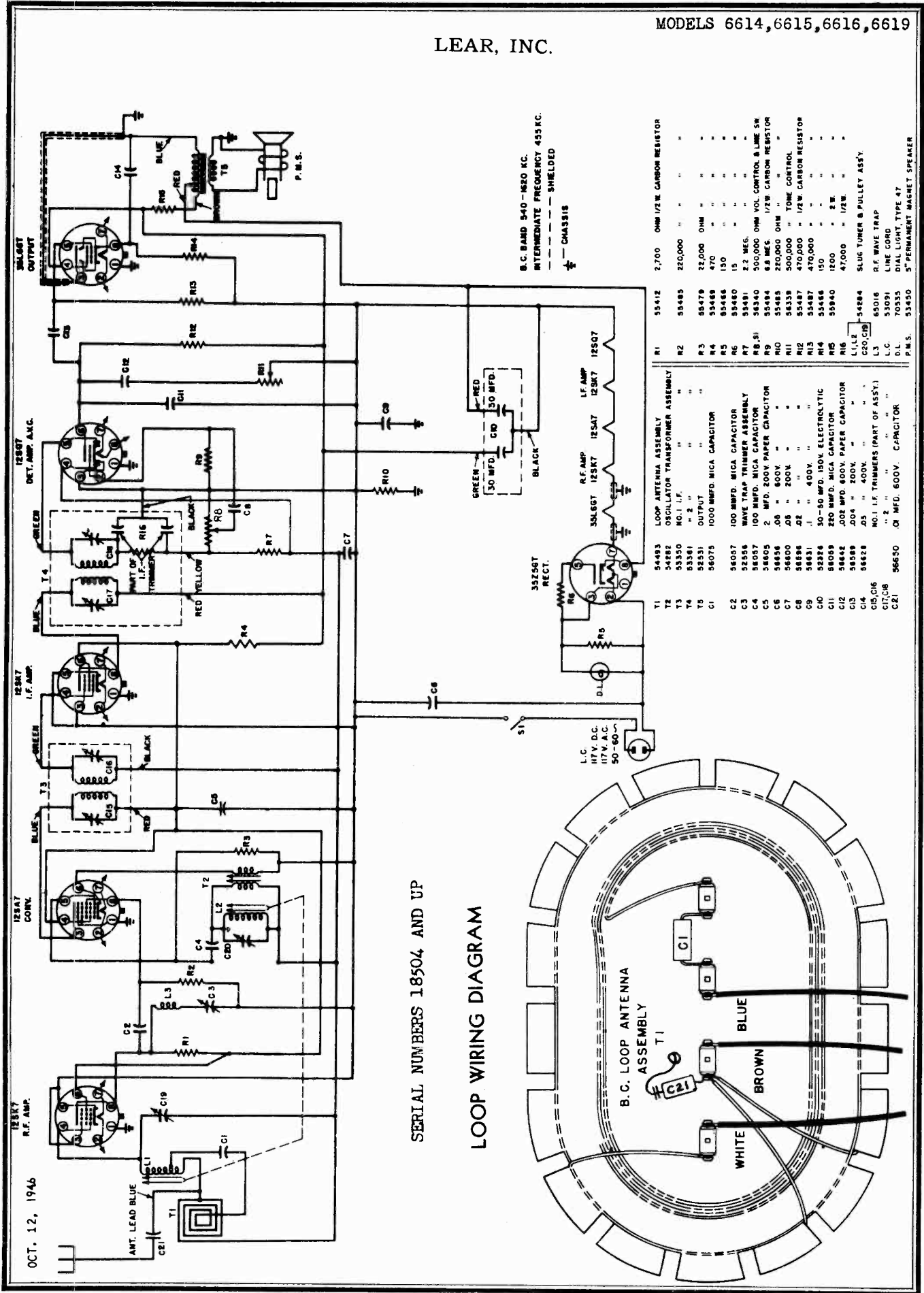
OPERATION	ALIGNMENT OF	GENERATOR CONNECTED TO	DUMMY ANTENNA	GENERATOR FREQUENCY	DIAL SETTING	TRIMMER	REMARKS
1	Set dial pointer at 1620 KC with tuning unit drive turned fully clockwise against stop.						
2	2nd IF	Pin No. 8 of 12SA7 and B-	.05 mf.	455 KC	1620 KC	C19, C20	Max. Output
3	1st IF					C17, 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



B. C. BAND 540-1620 KC.  
INTERMEDIATE FREQUENCY 435 KC.  
--- SHIELDED  
⊕ --- CHASSIS

SERIAL NUMBERS 18504 AND UP

LOOP WIRING DIAGRAM

