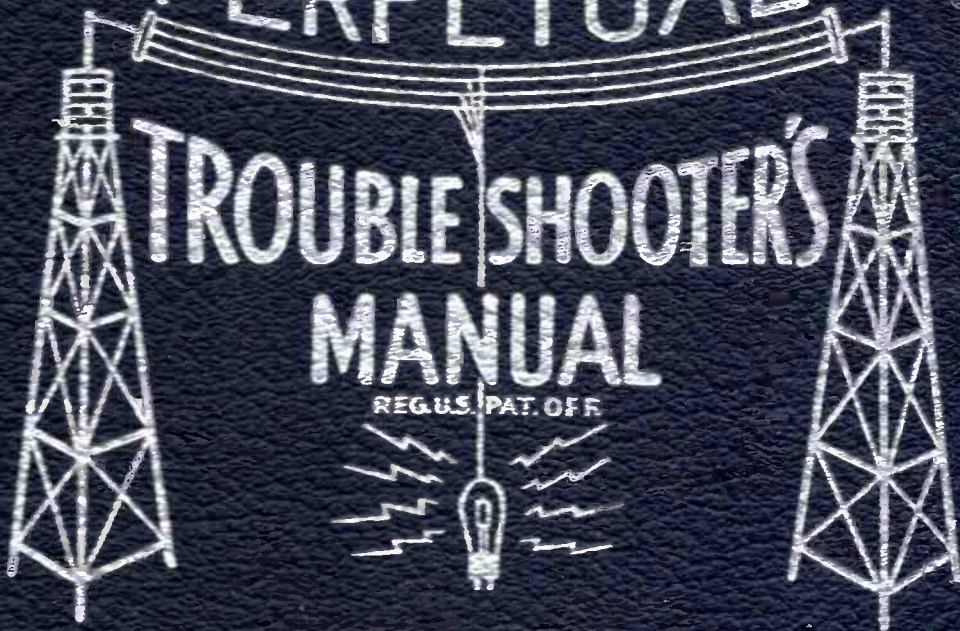


VOLUME XVI

PERPETUAL

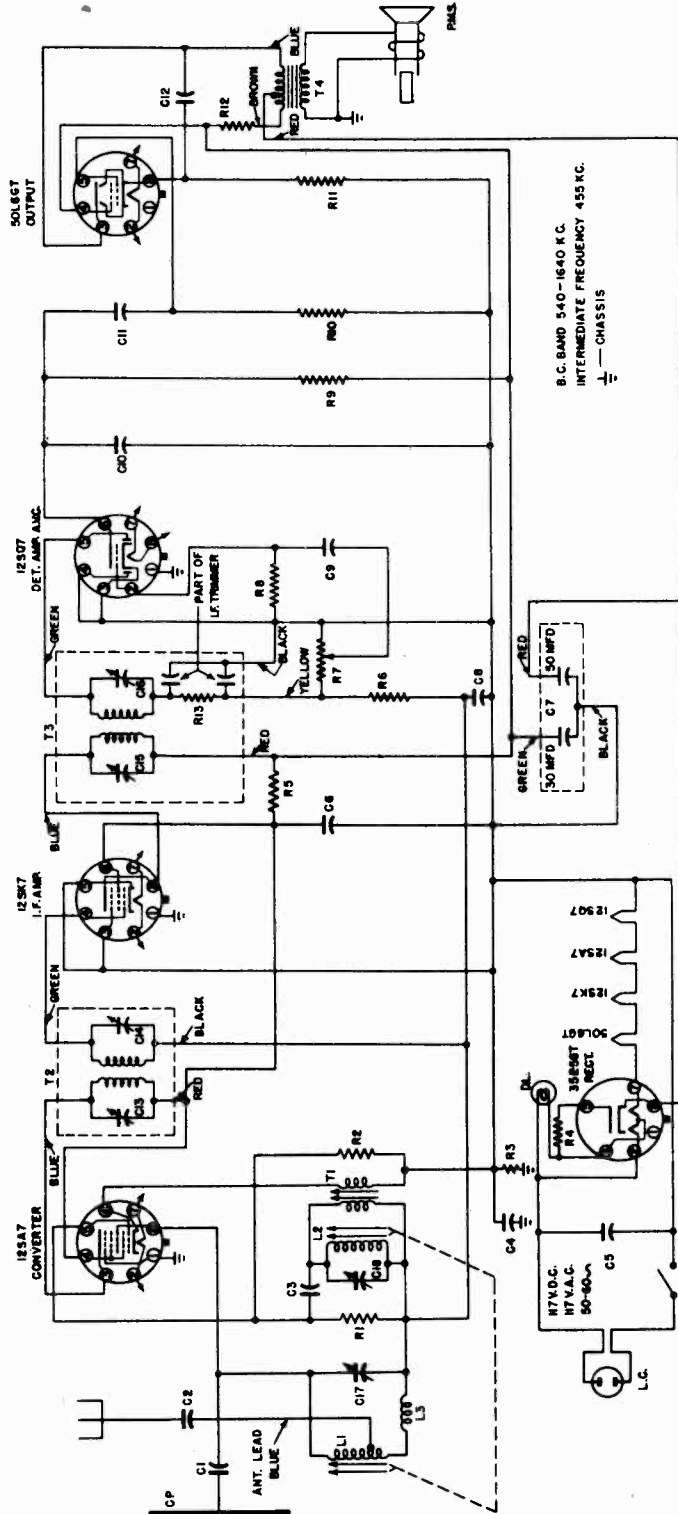


JOHN F. RIDER

LEAR, INC.

MODELS 565, 565BL, 566,
567, 568

JULY 1, 1946



DESCRIPTION

PART NO.

DWG. SYM.

DESCRIPTION

PART NO.

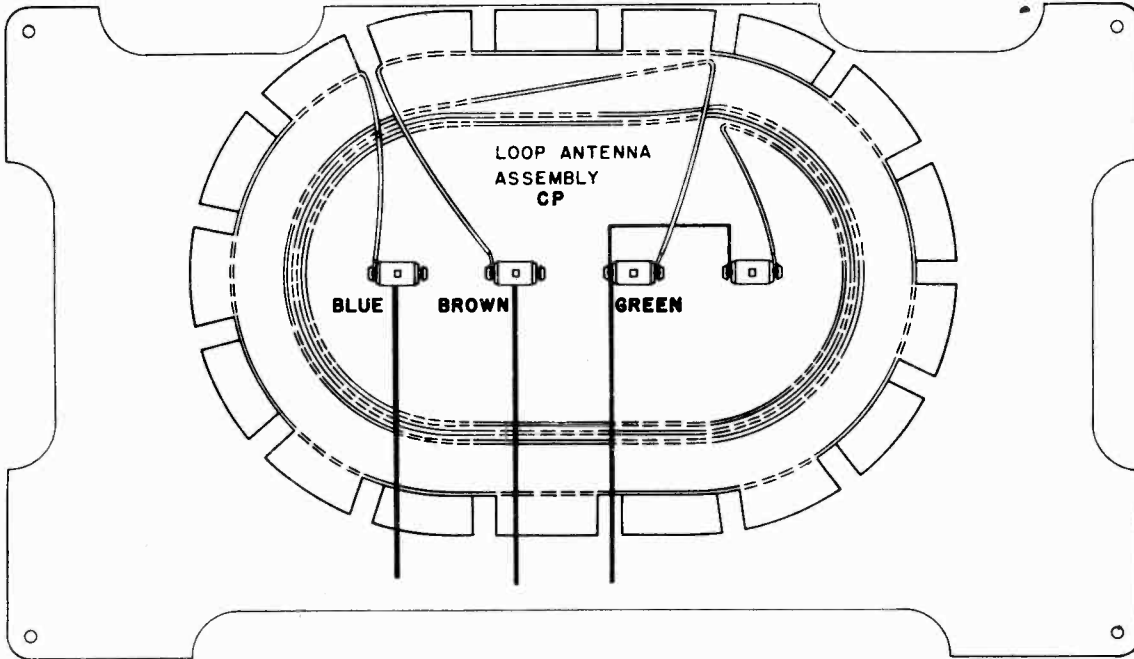
DWG. SYM.

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 & puller Assy.
C17, C18	53385	Antenna loading coil
L.C.	53091	Line cord
P.L.C.	70525	Dial light, type 47
P.M.S.	33450	5" Permanent magnet speaker
CP	52570	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	.02 mfd. 200 v. Paper Capacitor
C9	56596	.04 mfd. 200 v. Paper Capacitor
C10	56059	220 mmfd. Mica 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.)
C15, C16		

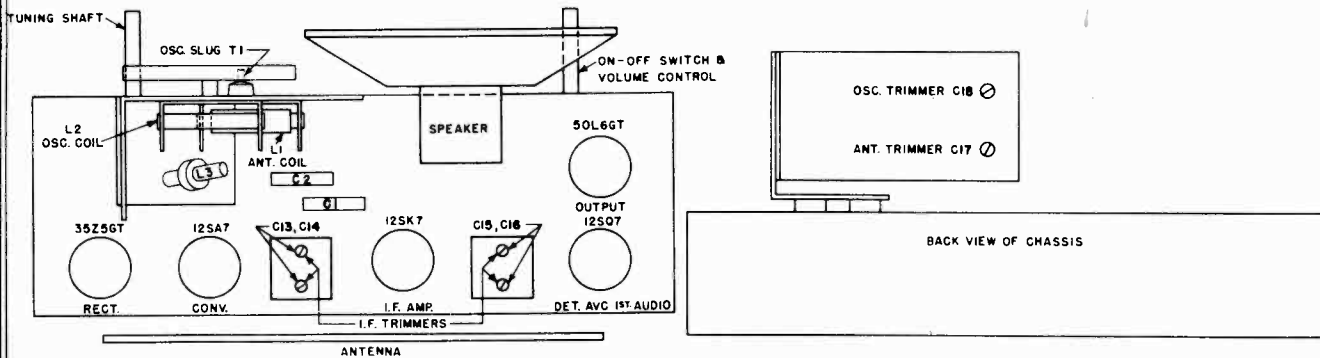
MODELS 565, 565BL, 566,
567, 568

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.						

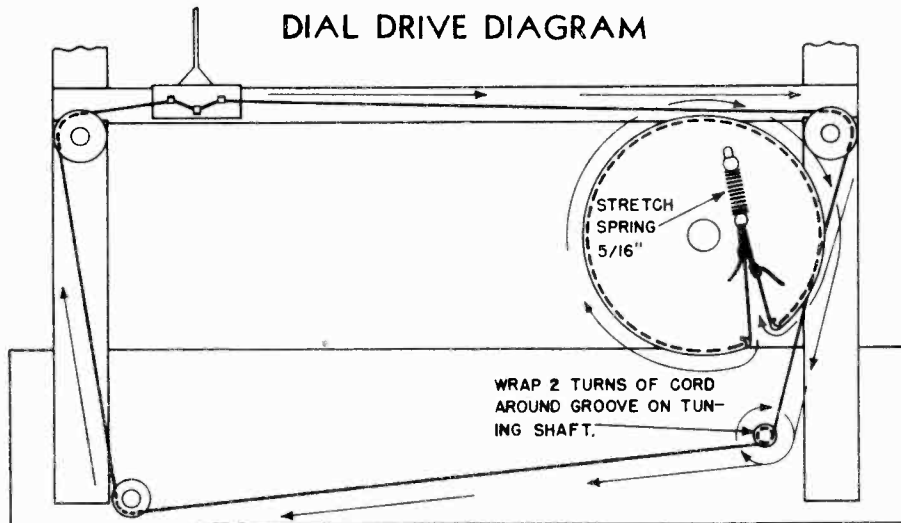
* Rock dial tuner slightly while adjusting

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.

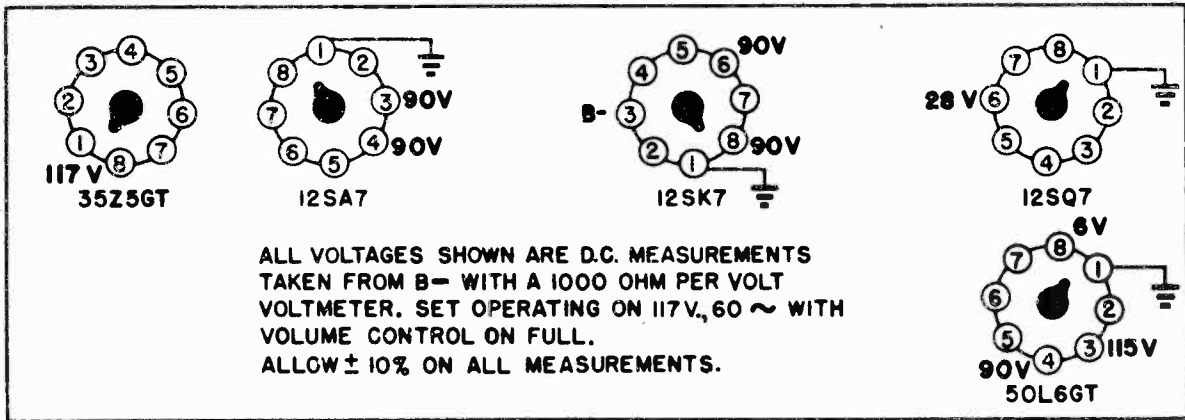
MODELS 565, 565BL, 566,
567, 568

LEAR, INC.

DIAL DRIVE DIAGRAM



FRONT VIEW



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

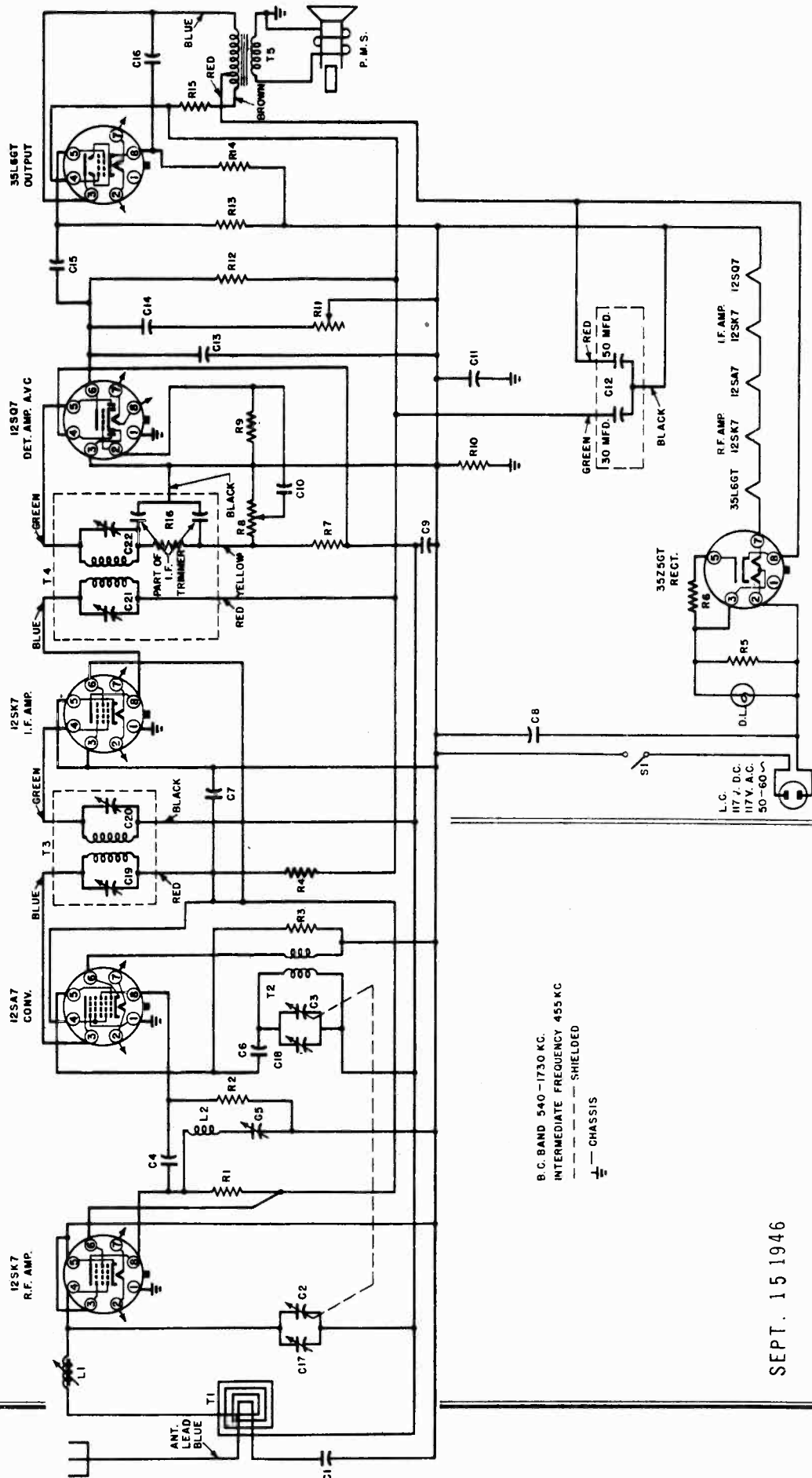
LEAR, INC.

DWG. SYM.	PART NO.	DESCRIPTION
T1	52570	LOOP ANTENNA ASSEMBLY
T2	61015	OSCILLATOR COIL
T3	51337	NO.1 I.F. TRANSFORMER
T4	53361	" 2 "
T5	52331	OUTPUT
C1	56985	.001 MFD. 200V. PAPER CAPACITOR
C2	52452	2 G-NG VARIABLE CAPACITOR & PULLEY
C3	(ALT) 60837	100 MMFD. MICA CAPACITOR
C4	52556	WAVE TRAP TRIMMER ASSEMBLY
C5	52556	100 MMFD. MICA CAPACITOR
C6	56057	100 MMFD. MICA CAPACITOR

DWG. SYM.	PART NO.	DESCRIPTION
R1	55425	NO.2 I.F. TRIMMERS (PART OF ASSY.)
R2	55485	4,700 OHM 1/2W CARBON RESISTOR
R3	55479	22,000 OHM
R4	55469	470 "
R5	55466	150 "
R6	55460	15 "
R7	55491	2.2 MEG.
R8, S1	56340	500,000 OHM VOL. CONTROL & LINE SW.

DWG. SYM.	PART NO.	DESCRIPTION
C7	56805	.2 MFD. 200V PAPER CAPACITOR
C8	56856	.05 " 600V "
C9	56800	" 200V "
C10	56896	.02 " 400V "
C11	56891	.1 " 400V "
C12	52326	30-50 MFD. 150V. ELECTROLYTIC
C13	56009	220 MMFD. MICA CAPACITOR
C14	56642	.005 MFD. 600V. PAPER CAPACITOR
C15	56389	.004 " 200V. "
C16	56628	.05 " 400V. "
C17		OSC. TRIMMER ON VARIABLE
C18		NO.1 I.F. TRIMMERS (PART OF ASSY.)
C19, C20		ALT. INDICATES ALTERNATE PART NO.

DWG. SYM.	PART NO.	DESCRIPTION
R9	55494	6.8 MEG.
R10	55485	220,000 OHM
R11	56339	" TONE CONTROL
R12	55487	470,000 "
R13	55487	470,000 "
R14	55486	150 "
R15	55840	12000 " 2W. "
R16	55841	47,000 " 1/2W. "
L1	52897	ART. LOAD COIL
L2	65016	R.F. WAVE TRAP
L.C.	93091	LINE CORD
D.L.	70535	DIAL LIGHT, TYPE 47
P.M.S.	53450	5" PERMANENT MAGNET SPEAKER



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

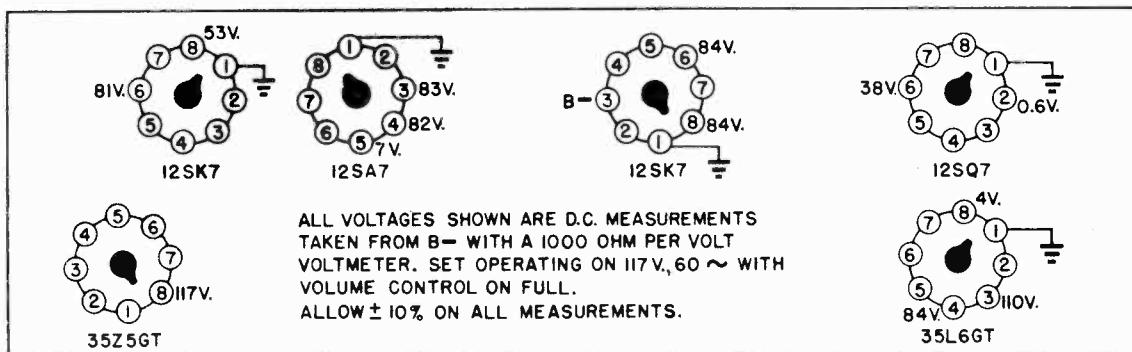
SEPT. 15 1946

LEAR, INC.

MODELS 662,663,665,6618
MODEL 6617PC

MODELS 662,663,665,6618

CHASSIS VOLTAGE CHART



ALL VOLTAGES SHOWN ARE D.C. MEASUREMENTS TAKEN FROM B- WITH A 1000 OHM PER VOLT VOLTMETER. SET OPERATING ON 117V., 60 ~ WITH VOLUME CONTROL ON FULL. ALLOW ± 10% ON ALL MEASUREMENTS.

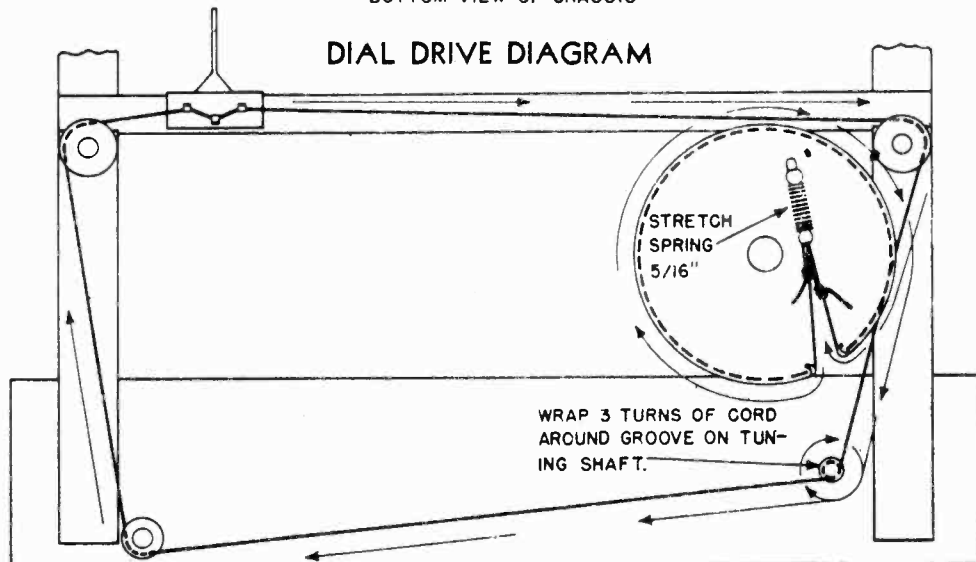
TUNING SHAFT

TONE CONTROL

ON-OFF SWITCH & VOLUME CONTROL

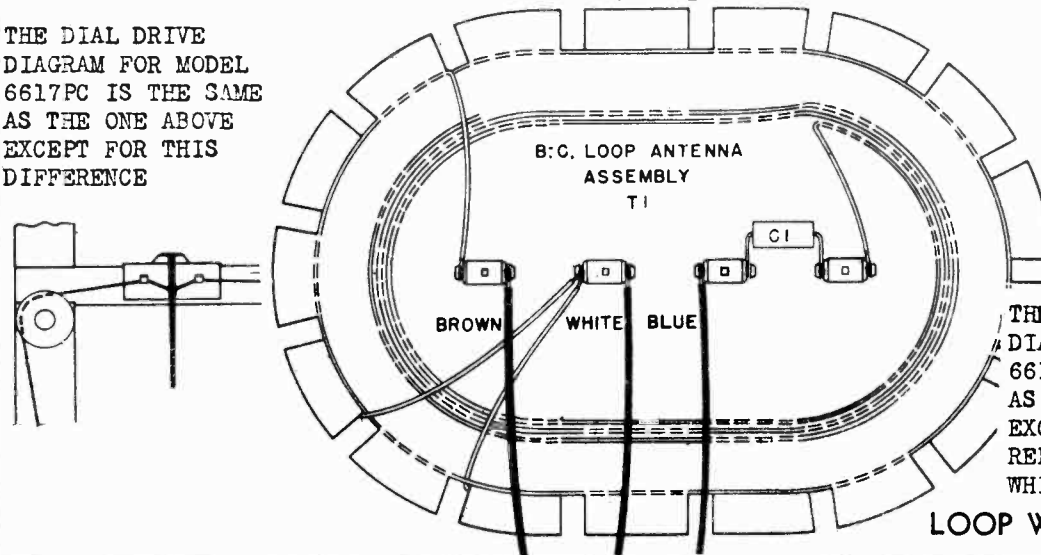
BOTTOM VIEW OF CHASSIS

DIAL DRIVE DIAGRAM



FRONT VIEW

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

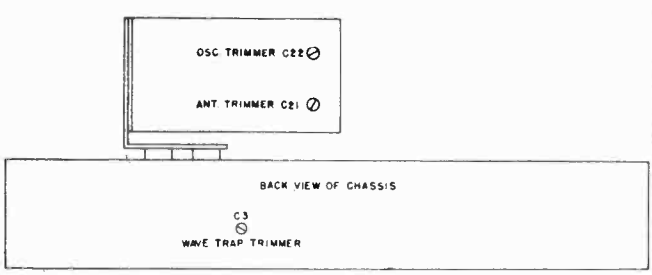
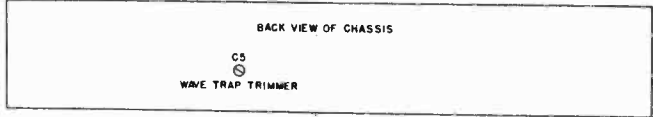
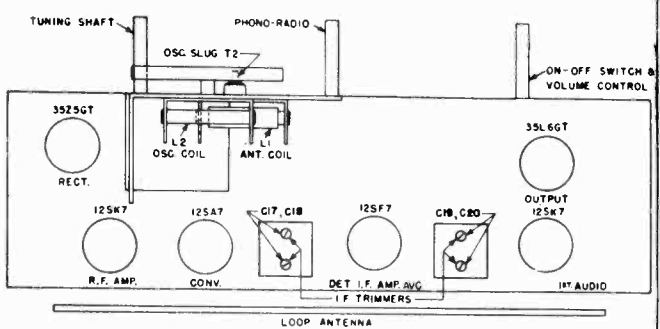
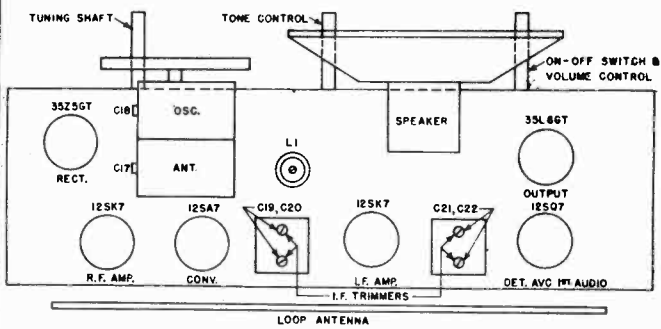


THE LOOP WIRING DIAGRAM FOR MODEL 6617PC IS THE SAME AS THE ONE ON THE LEFT EXCEPT THAT BROWN IS REPLACED BY WHITE AND WHITE BY BROWN

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

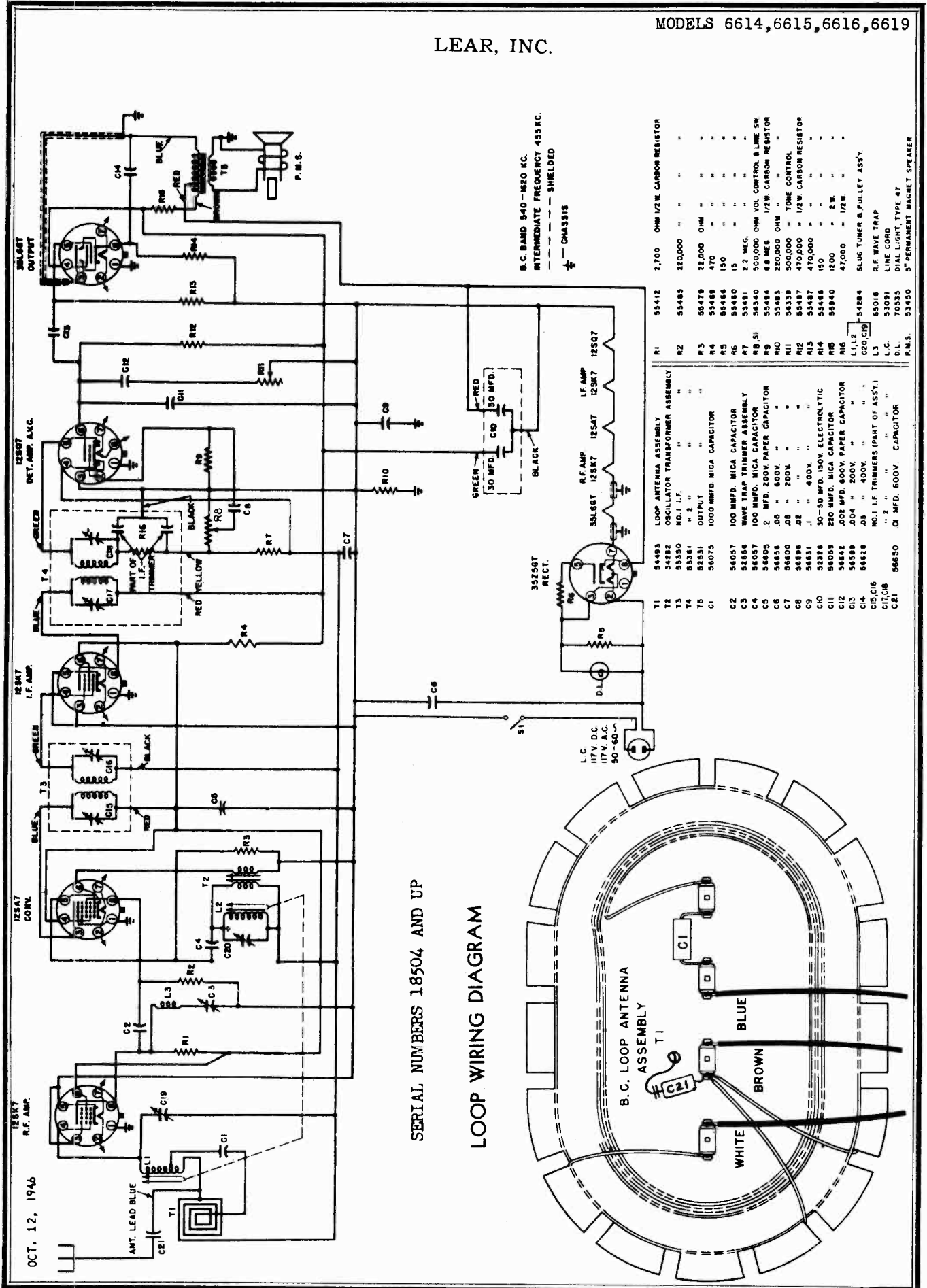
OPERATION	ALIGNMENT OF	GENERATOR CONNECTED TO	DUMMY ANTENNA	GENERATOR FREQUENCY	DIAL SETTING	TRIMMER	REMARKS
1	Set dial pointer at 1620 KC with tuning unit drive turned fully clockwise against stop.						
2	2nd IF	Pin No. 8 of 12SA7 and B-	.05 mf.	455 KC	1620 KC	C19, C20	Max. Output
3	1st IF					C17, 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 1.8504 AND UP

LOOP WIRING DIAGRAM

