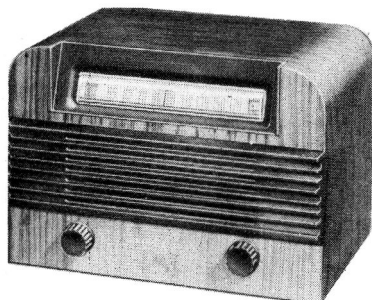


MODELS CL-541, CL-541A CL-541D, CL-543

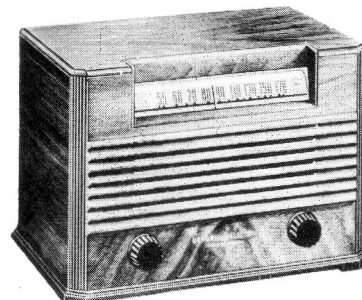
5-TUBE, SINGLE BAND, A-C/D-C RADIO RECEIVERS



MODEL CL-541



MODEL CL-541A
MODEL CL-541D



MODEL CL-543

SPECIFICATIONS

PHYSICAL DIMENSIONS

Model	CL541	CL541A	CL541D	CL543
Height	7 5/16"	7 3/16"	7 3/16"	7 3/16"
Width	10 1/8"	10 3/8"	10 3/8"	10 3/8"
Depth	6 9/16"	6 5/8"	6 5/8"	6 5/8"

TUNING CONTROL DRIVE RATIO 7:1

ELECTRICAL SPECIFICATIONS

105-117 Volts, 25-60 Cycles, or
105-117 Volts, d-c; 30 watts

TUNING FREQUENCY RANGE 540-1670 KC

INTERMEDIATE FREQUENCY 460 KC

MAXIMUM POWER OUTPUT 1.5 watts

LOUD-SPEAKER - PM DYNAMIC

Outside cone diameter 4 inches
Voice coil impedance (400 cycles) 3.2 ohms

TUBES

Converter and oscillator GE-12SA7
IF Amplifier GE-12SK7
Detector, AVC, audio GE-12SQ7
Power output GE-50L6GT/G
Rectifier GE-35Z5GT/G
Dial Lamp Mazda No. 47

General Information

These Models are five-tube a-c/d-c superheterodyne receivers, housed in attractively styled walnut wood cabinets.

ALIGNMENT PROCEDURE

ALIGNMENT FREQUENCIES

IF 460 KC
RF 1500 KC

The location of all trimmers is shown in Fig. 1

PRECAUTION

If the signal generator is AC operated, use an isolating transformer between the power supply and the radio receiver power input. The use of an isolating capacitor is not recommended as AC through the capacitor will introduce hum modulation and/or create the possibility of a burned-out signal generator attenuator.

IF ALIGNMENT

Connect an output meter across the voice coil. Turn the volume control to maximum. Set test oscillator to 460 KC and keep the oscillator output as low as a readable meter reading will permit.

Apply signal to the converter grid through a .05 mfd. capacitor and align progressively the trimmers in the 2nd and 1st IF transformers.

RF ALIGNMENT

Close the gang condenser by rotating the tuning control. Slide the pointer along the cord until it lines up with the first dial marking on the left. Now rotate the tuning control until the pointer is over the 1500 KC dial mark. Apply a 1500 KC signal to the receiver by means of a standard dummy antenna. Align the oscillator trimmer (C-7) to bring in the signal and peak the signal by adjusting the antenna trimmer (C-5). (See Fig. 1 for trimmer locations.)

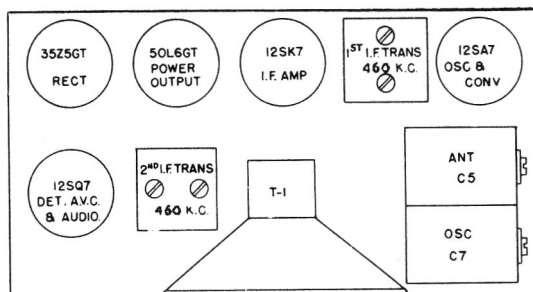
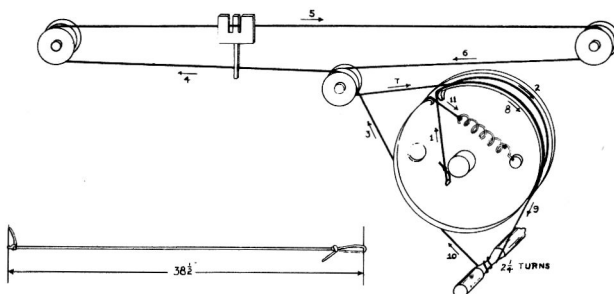
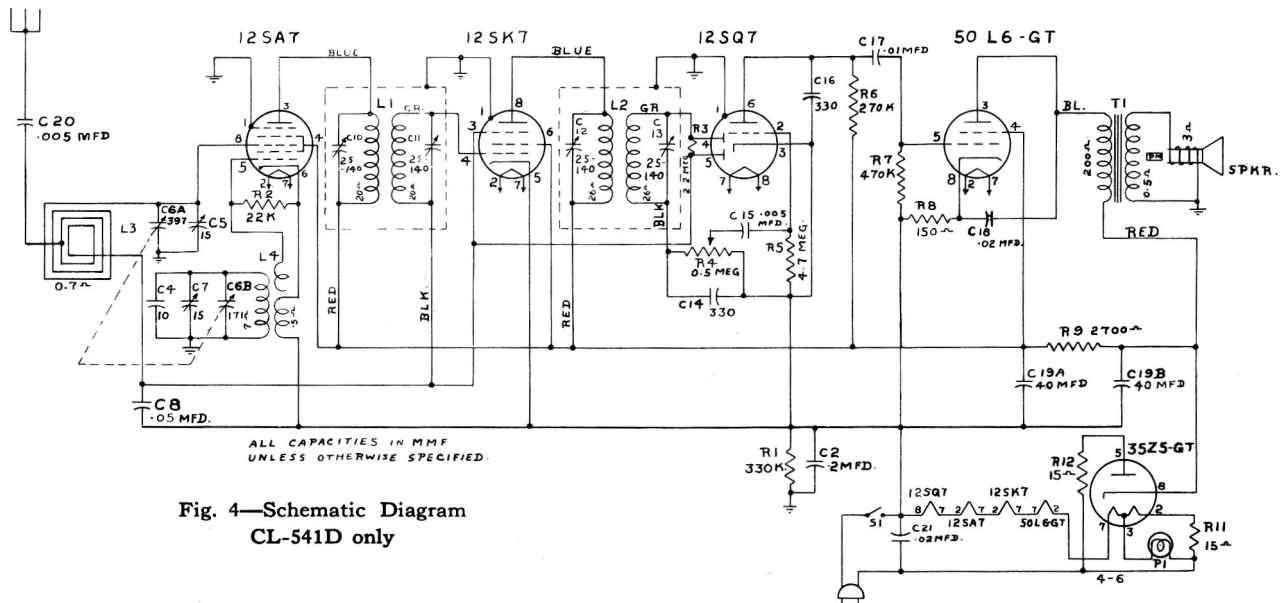
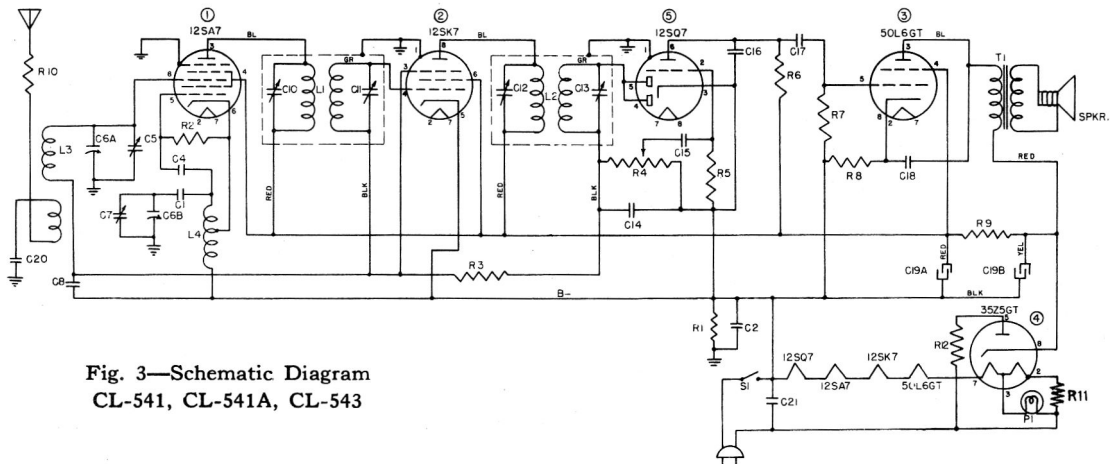
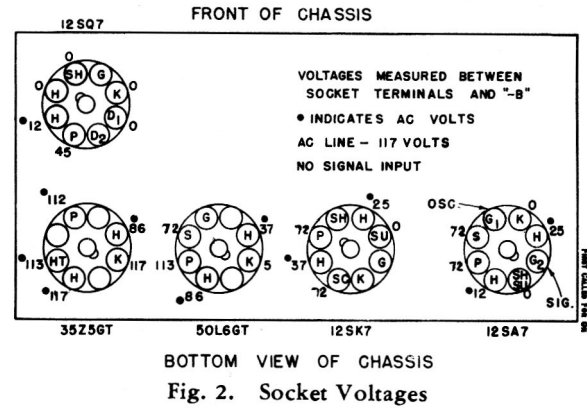


Fig. 1. Tube and Trimmer Location

SPECIAL SERVICE INFORMATION

The following information will be very useful in servicing receivers if a vacuum tube voltmeter or similar voltage measuring instrument is available.

- (1) Stage Gains ♦
 Antenna Post to Converter Grid 3.0 at 1000 KC
 Converter Grid to IF Grid 60 at 460 KC
 IF Amplifier Grid to Diode Plate 45 at 460 KC
 - (2) 0.20-volt, 400-cycle signal across the volume control will produce 1/2 watt speaker output. ♦
 (Volume control turned to maximum).
 - (3) Average DC voltage developed across oscillator grid leak 6 volts
- ♦ Variations of $\pm 20\%$ permissible. All readings obtained with enough signal input to give 1/2-watt speaker output.



REPLACEMENT PARTS LIST
MODELS CL541, CL541A, CL541D, CL543

PART NO.	SYMBOL	DESCRIPTION	PART NO.	SYMBOL	DESCRIPTION
M29J107-4	C6A, C6B	Condenser - Tuning CL541, CL541A CL543	K8531646-4	T1	Transformer - Output CL541
M8533586	C6A, C6B	Condenser - Tuning CL541D	K26J621	R4	Volume control and switch
K8531607-1	C19A C19B	Capacitor - Electrolytic 2-40 mfd. 150V	MISCELLANEOUS PARTS		
V8530028	L4	Coil - Oscillator CL541, CL541A, CL543	P8534011-2		Dial scale CL541, CL541A, CL543
M8533606	"	Coil - Oscillator CL541D	P8534022-1		Dial scale CL541D
UCF60894	"	Socket for dial lamp	K26J615		Dial scale pointer
M8533516-1	L3	Loop & back assm. CL541	V8530036		Dial Drive shaft
M8533516-2	L3	Loop & back assm. CL543	M29J106		Dial Scale window
M8533516-5	"	Loop & back assm. CL541A	V23J562-1		Dial Cord spring
M8533602-2	"	Loop & back assm. CL541D	V24J101		Dial Drive cord CL541, CL541A, CL543
UCF62064		Socket - Octal	K8531666		Dial Drive cord CL541D
S400D-5		Speaker	TM8540718-1		Knob
K26J675-9	L1	Transformer - 1st I.F.	V22J870		Spring for knob
K26J171-9	L2	Transformer - 2nd I.F.			
K8531617	T1	Transformer - Output CL541, CL541A CL543			

Data subject to change without notice

NOTE: Always mention Model No. of Radio when ordering parts.

Small Capacitors and Resistors not listed above
are readily available from your local Radio Parts Jobber.