

United Motors Service - Delco

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	Model: 980534 (Buick)	Chassis:	Year: Pre October 1938
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		
Resources			
Riders 9 (IX) UNITED MOTORS 9-73			
Riders 9 (IX) UNITED MOTORS 9-74			
Riders 9 (IX) UNITED MOTORS 9-75			

UNITED MOTORS SERVICE

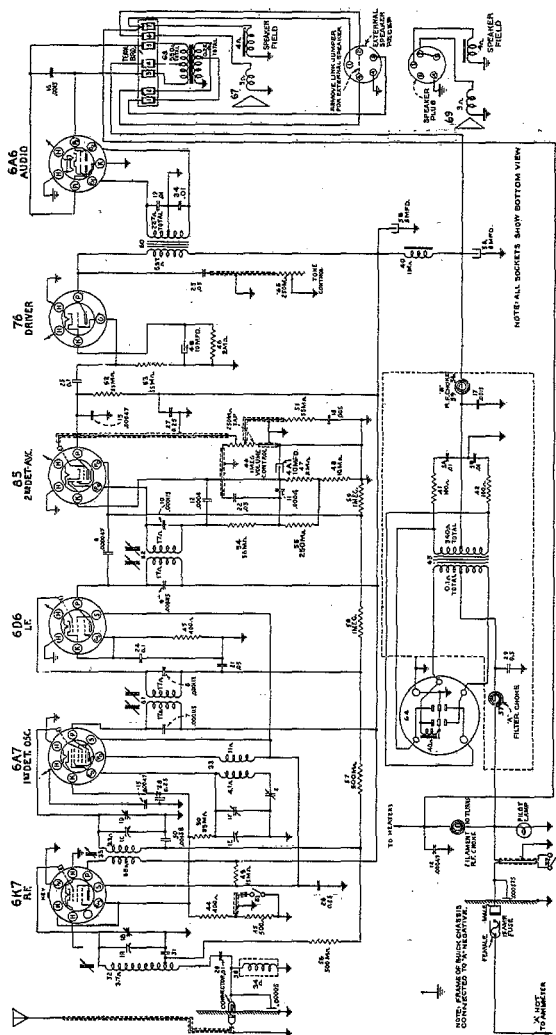
MODELS 980534, 980535

Buick

Schematic, Voltage

Buick

These receivers are designed specifically for the 1937 Model Buicks
Model 980535 is identical to Model 980534 except that an additional speaker is provided.



TUBE SOCKET VOLTAGES

Type	Function	H	P	S	G	Gs	K	Go	Po
6K7	R-F Amp.	6.0	235	90	0	5.1	5.1	-	-
6A7	Det.-Osc.	6.0	235	90	0	-	5.1	1.7	89
6D6	I-F Amp.	6.0	235	90	0	3.3	3.3	-	-
85	Det.-Aud.	6.0	145	-	0	-	15.0	-	-
76	Driver	6.0	230	-	0	-	11.0	-	-
6A6	Output	6.0	260	-	0	-	0	-	-

Readings taken on 6.3 volt battery using a 1000 ohm per volt meter from tube socket contacts to ground.

IF PEAK 260 KG

BUICK MODELS 980534-5

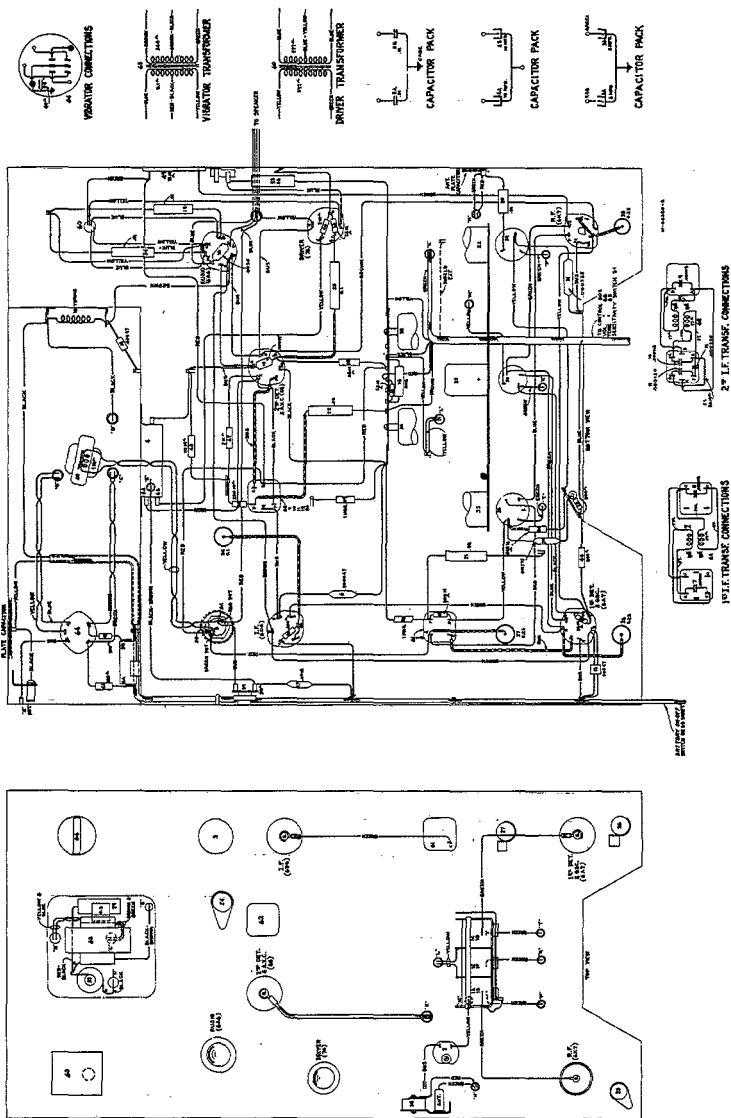
Buick 980534-5

Date: 2-28-38

Buick

Chassis Wiring

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MODELS 980534, 980535

Buick
Alignment

Buick 980534-5

CIRCUIT ALIGNMENT

NOTE: BEFORE STARTING ALIGNMENT PROCEDURE, SEE THAT EITHER A JUMPER IS INSTALLED IN THE DUAL SPEAKER PLUG SOCKET (SEE CIRCUIT DIAGRAM) OR THE DUAL SPEAKER ITSELF IS CONNECTED. FAILURE TO DO THIS WILL RESULT IN AN OPEN CIRCUIT IN THE VOICE COIL.

1. Aligning I-F Stages at 260 Kilocycles

- (a) Remove the top and bottom covers from the receiver case and place the receiver so that all adjustments are accessible. Connect the signal output of the signal generator to the control grid cap of the 6A7 tube through a .25 mfd. condenser (without disconnecting the 6A7 tube through a .25 mfd. condenser). Connect the ground of the signal generator to the grid lead and connect the ground of the signal generator to the plate of the 6A7 tube. Connect the output meter across the two signal generator terminals. Adjust the signal generator until the signal generator accurately to 260 KC. Adjust the four screws of the two I-F transformers; one on top and one on bottom of each transformer (illus. #61 and 62, Figs. 2 & 3) for maximum output. Repeat these adjustments a second time for greater accuracy. Check I-F Band Spread

The Model 165 Cathode Ray Oscilloscope should be used to check the I-F band spread after completing the "Alignment Procedure". Slight adjustments to the I-F stages may be found necessary in order to obtain a symmetrical selectivity curve. Complete information concerning this check with the oscilloscope, is given in the Oscilloscope Manual, included with each instrument.

2. R-F Stage Alignment

The antenna and R-F coils used in these receivers contain adjustable iron cores, which require very careful adjustment at the factory. These adjustments are sealed and no further attempts to adjust them in service should be made unless they show evidence of being disturbed or tapered with. In any event where realignment is deemed necessary, the capacity adjustments should be made first in an effort to obtain normal sensitivity.

Two separate procedures are given for aligning the R-F circuits of these receivers and the procedure to be used will depend on whether the sealed iron core adjustments have been disturbed. The first procedure contains only capacity adjustments, while the second procedure contains both capacity and inductance adjustments. The R-F coils are pre-set at the factory and in most instances will require no further adjustment.

Properly align the tuning dial pointer to the gang tuning condenser by turning the receiver tuning control clockwise until all stops are reached at the high-frequency end of the dial, then rotate the tuning control counter-clockwise until all stops are reached at the low-frequency end of the dial.

IN THE FOLLOWING PARAGRAPHS WHEN ALIGNMENT IS MADE AT 600 K.C. THE DIAL POINTER ON THE TUNING HEAD SHOULD BE SET TO THE CENTER OF THE "0" IN "60" WHEN LOOKING STRAIGHT INTO THE DIAL.

3. Aligning R-F Stages—Capacity Adjustments

- (a) Connect the signal generator to the control grid cap of the 6A7 detector-oscillator tube through a .25 mfd. condenser. Adjust the signal generator to 1560 KC. Set the receiver tuning control to its minimum capacity (full open) position. Adjust the oscillator parallel trimmer (illus. 1-F, Fig. 2) for maximum output.
- (b) Connect the signal generator to the antenna connection on the receiver through a .0005 mica condenser and adjust to 1400 KC. Tune the receiver to this signal and adjust the R-F and antenna trimmers (illus. 1-D and 1-B, Fig. 2) on gang condenser for maximum output.
- (c) Adjust signal generator to 600 KC and tune receiver to 600 KC. Adjust the oscillator series condenser (illus. #2, Fig. 2) while rocking the gang tuning condenser back and forth through the normal range of the gang tuning control.
- (d) Adjust signal generator to 1400 KC and tune receiver to this signal. Readjust the oscillator, R-F and antenna trimmers (illus. #1-F, 1-D and 1-B, Fig. 2) for maximum output.

4. Aligning R-F Stages—Capacity and Inductance Adjustments

This procedure covers all R-F adjustments and should not be resorted to, unless the adjustments outlined in section "3" fail to restore normal sensitivity.

- (a) Connect the signal generator to the control grid cap of the 6A7 tube through a .25 mfd. condenser. Adjust the signal generator to 1560 KC. Set the receiver tuning control to its minimum capacity (full open) position. Adjust the oscillator parallel trimmer (illus. #1-F, Fig. 2) for maximum output.
- (b) Adjust the signal generator to 600 KC and tune the receiver to 600 KC. Adjust the oscillator series condenser (illus. #2, Fig. 2) for maximum output.
- (c) Adjust the signal generator to 1560 KC and set the receiver tuning control to its minimum capacity (full open) position. Adjust the oscillator parallel trimmer (illus. #1-F, Fig. 2) for maximum output.
- (d) Connect signal generator to the antenna connector of the receiver through a .0005 mfd. mica condenser. Adjust the signal generator to 600 KC and tune the receiver to this signal. Adjust the magnets core screws of the R-F and antenna coils (illus. #35 and #32, Fig. 3) for maximum output.
- (e) Adjust signal generator to 1400 KC and tune receiver to this signal. Readjust the oscillator, R-F and antenna trimmers (illus. #1-F, 1-D and 1-B, Fig. 2) for maximum output.
- (f) Adjust signal generator to 600 KC and tune the receiver to this signal. Adjust the R-F and antenna magnet core screws (illus. #35 and #32, Fig. 3) for maximum output.
- (g) Adjust signal generator to 600 KC and tune receiver to 600 KC. Adjust the oscillator series condenser (illus. #2, Fig. 2) while rocking the gang tuning condenser back and forth through the signal range of the gang tuning control.
- (h) Adjust signal generator to 1400 KC and tune receiver to this signal. Readjust the oscillator, R-F and antenna trimmers (illus. #1-F, 1-D and 1-B, Fig. 2) for maximum output.