



DELCO

electronic parts

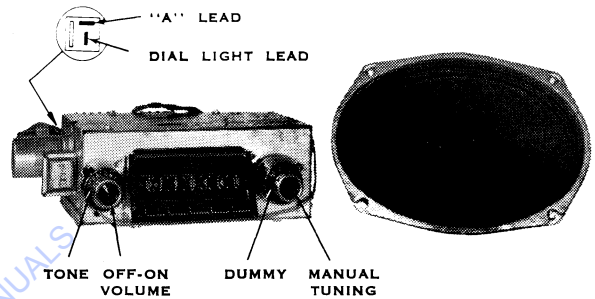
AUTO RADIO BULLETIN

Bulletin	6D-864
Chevrolet	987575
Date	10-15-56
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FIRST ISSUE	

SUBJECT: SERVICE INSTRUCTIONS - CHEVROLET CUSTOM DELUXE WITH PUSH BUTTON TUNING - MODEL 987575

GENERAL

- MOUNTING—All 1957 Chevrolet Cars.
- TUBES—Five.
- TRANSISTOR—One.
- SPEAKER—6"x9" Elliptical, Permanent Magnet.
- TUNING—Manual and 5 P. B. Mechanical.
- ANTENNA TRIMMER COMPENSATION—for Antennas Between 0.000050 - 0.000090 Mfd.
- TUNING RANGE—540-1600 KC.



MODEL 987575

PUSH BUTTON SETUP PROCEDURE

Pull Push Button to the left and out. Tune in desired station manually. Push button all the way in.

ALIGNMENT PROCEDURE

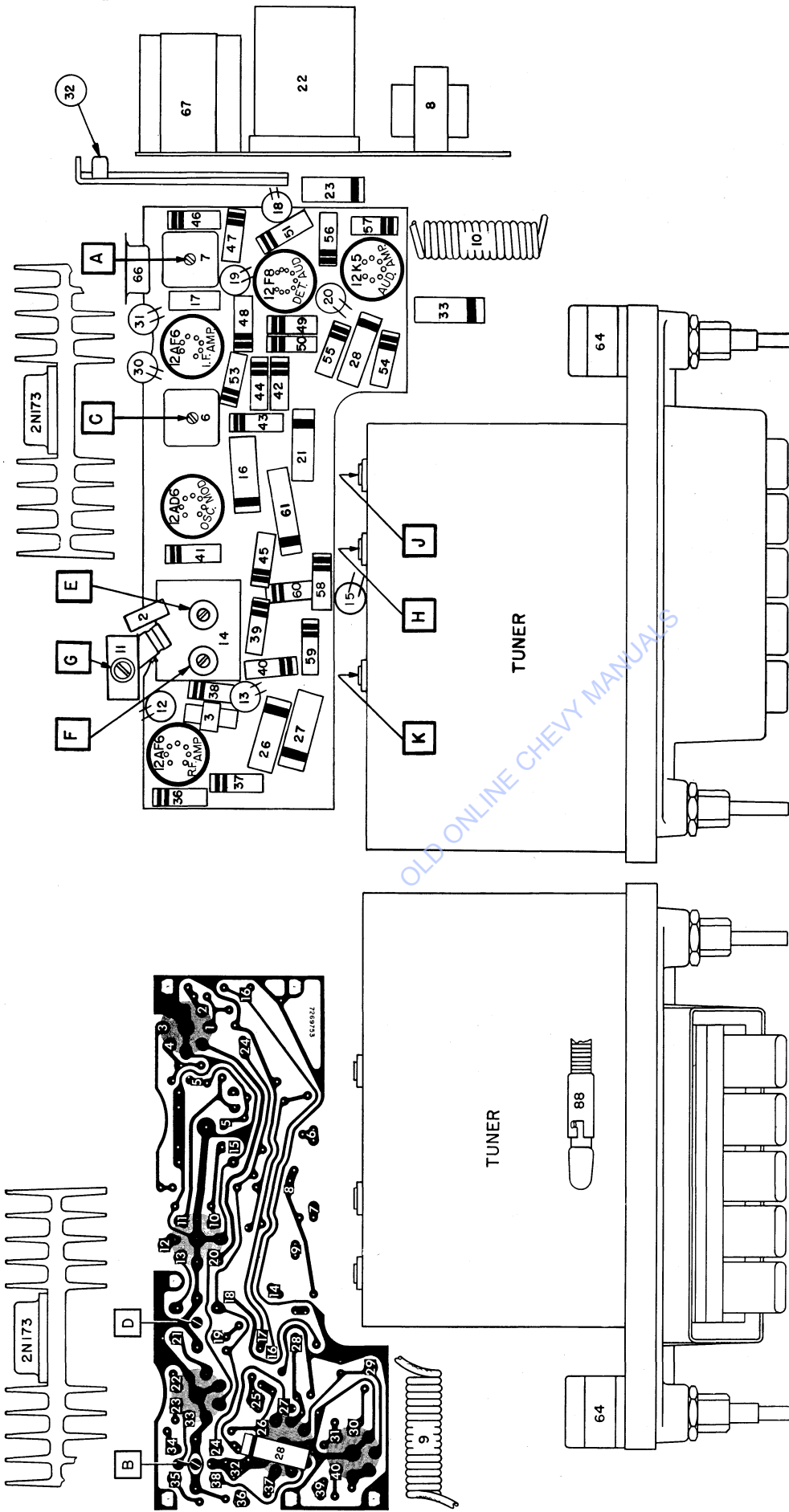
- Output Meter Connections.....Across Voice Coil
- Generator Return.....To Receiver Chassis
- Dummy Antenna.....In Series With Generator
- Volume Control Position.....Maximum Volume
- Tone Control Position.....Treble Position
- Generator Output.....Minimum for Readable Indication

Steps	Series Capacitor or Dummy Antenna	Connect Signal Generator to	Signal Generator Frequency	Tune Receiver to	Adjust in Sequence For Max. Output
1	0.1 Mfd.	12AD6 Grid (Pin #7)	262 KC	High Frequency Stop	A, B, C, D
2	0.000068 Mfd.	Antenna Connector	1615 KC	High Frequency Stop	*E, F, G
3	0.000068 Mfd.	Antenna Connector	640 KC	Signal Generator Signal	J, K
4	0.000068 Mfd.	Antenna Connector	1615 KC	High Frequency Stop	F, G
5	0.000068 Mfd.	Antenna Connector	900 KC	Signal Generator Signal	L**

*Before making this adjustment check mechanical setting of oscillator core "H." The rear of the core should be 1 5/8" from the mounting end of the coil form. (This measurement is readily made by inserting a suitable plug in the mounting end of the coil form.) Core adjustment should be made with a non-metallic screw driver.

**L is the pointer adjustment which is on the connecting link, between the pointer assembly and core guide bar (See tuner Dwg.). It should be adjusted so that when looking directly at the dial the pointer is on the 1100 KC mark. This setting is to give the correct relationship between the pointer and the dial when the radio is installed in a car.

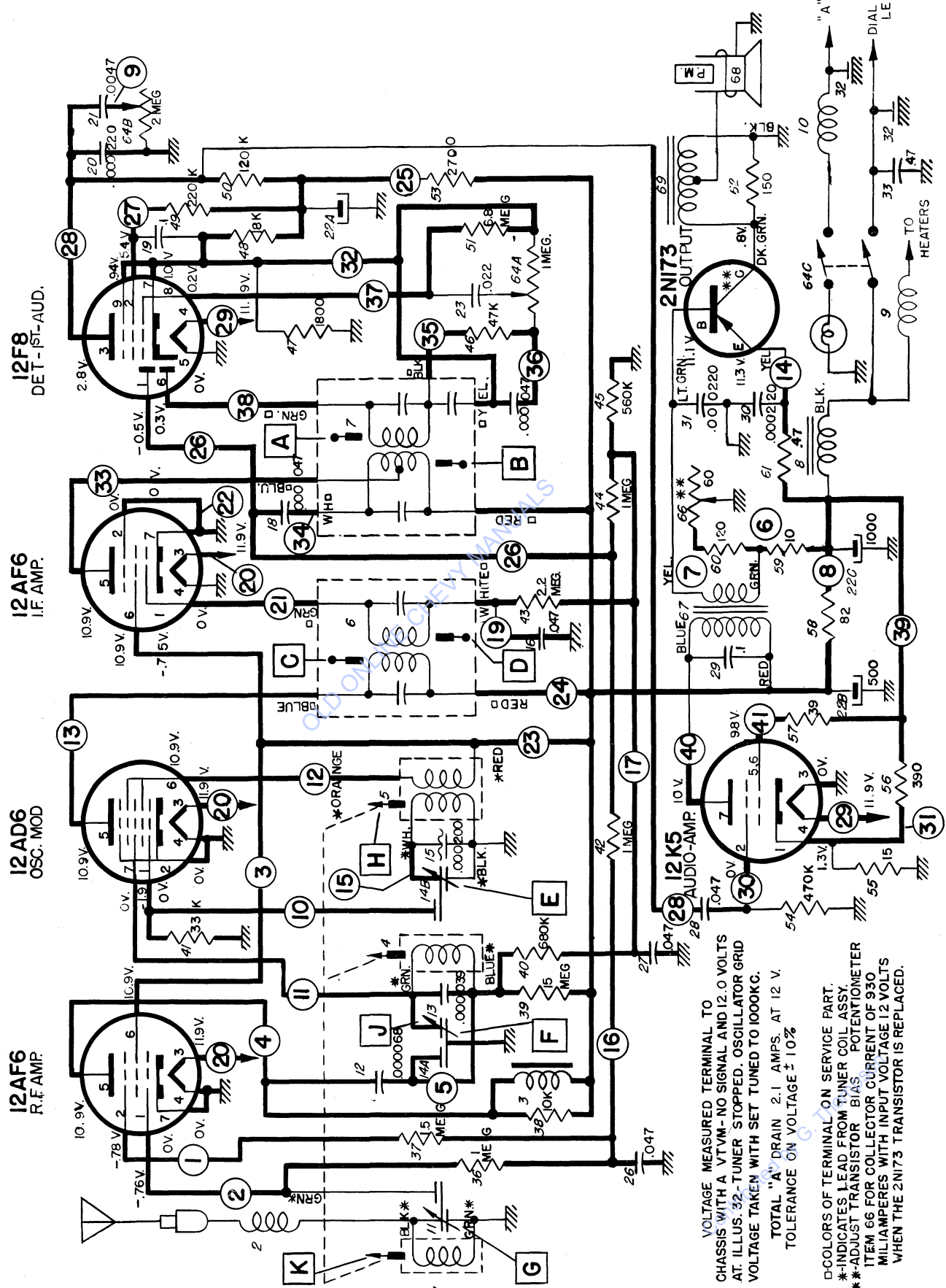
With the radio installed and the car antenna plugged in adjust the antenna trimmer "G" for maximum volume with the radio tuned to a weak station between 600 and 1000 KC (see sticker on case.)



PARTS LAYOUT—TUBE VIEW

PARTS LAYOUT—CHASSIS VIEW

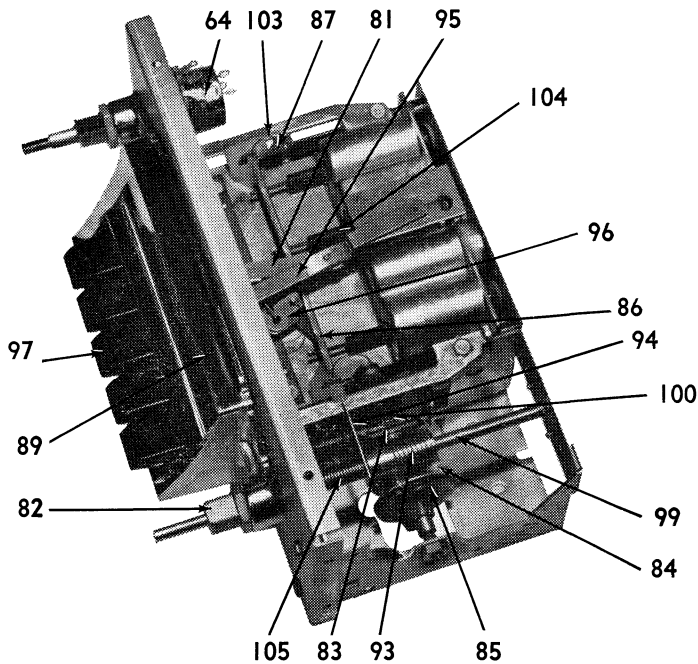
Contributed by G. Thompson



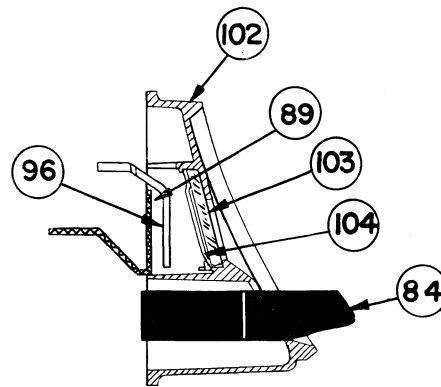
VOLTAGE MEASURED TERMINAL TO CHASSIS WITH A VTVM- NO SIGNAL AND 12.0 VOLTS AT ILLUS. 32-TUNER STOPPED. OSCILLATOR GRID VOLTAGE TAKEN WITH SET TUNED TO 1000K.C. TOTAL "A" DRAIN 2.1 AMPS. AT 12 V. TOLERANCE ON VOLTAGE ± 10%

D-COLORS OF TERMINAL ON SERVICE PART.
*-INDICATES LEAD FROM TUNER COIL ASSY.
**-ADJUST TRANSISTOR BIAS POTENTIOMETER ITEM 66 FOR COLLECTOR CURRENT OF 930 MILLIAMPERES WITH INPUT VOLTAGE 12 VOLTS WHEN THE 2N173 TRANSISTOR IS REPLACED.

CHEVROLET 987575

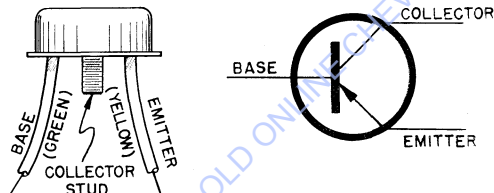


TUNER



ESCUTCHEON CROSS SECTION

RECOMMENDED TROUBLESHOOTING PROCEDURE



The tube stages in this receiver may be checked in the same manner as similar stages in high voltage tube circuit radios. **CAUTION:** Do not ground any point in the transistor base circuit, including the input transformer secondary, Illustration #67, as this will fatally damage the transistor.

The recommended procedure for checking this radio is as follows:

1. Make certain the antenna is good, and the "A" supply voltage normal.
2. Check the tubes by substituting new ones.
3. Signal trace, using isolated (capacitor in lead) signal generator or "signal tracer." A strong audio signal injected at the 12K5 tube plate, pin #7, should be heard in the case of a dead radio. (A quick check of the audio stage can be made with the radio warmed up by pulling out the 12K5 tube and listening for a "click". If the "click" is heard the transistor stage is working).

TROUBLE SHOOTING THE OUTPUT STAGE

A quick way to determine that the 2N173 is conducting can be made by checking the collector voltage, from transistor case to the radio case. If no voltage is present the transistor is not conducting or the transistor heat radiator is grounded to the radio case. If the voltage at the collector is higher than listed the transistor is conducting too heavily (check with milliammeter) or the output transformer is open. The amount of current the transistor conducts is determined by the voltages at each element, the resistor in the base and emitter circuits, the input transformer secondary resistance, and the transistor itself. The most common defect in the transistor is an internal short between emitter and collector. To check for this, use the following procedure:

1. Unsolder base and emitter leads from the circuit.
2. Set ohmmeter on the "R x 1" scale (no other scale should be used).
3. Place negative lead of ohmmeter (polarity refers to internal ohmmeter battery) on collector, and positive lead on the emitter.
4. The transistor is shorted if reading is "0".

If a transistor is replaced, the "bias" adjustment should be made for the new transistor. Insert a milliammeter in the collector lead and adjust the bias control for a collector current of 930 ma.

RADIO BLOWS FUSES

If the radio blows fuses, check for a shorted transistor. If the transistor is O.K. check for a short in the radio "A" supply circuit.

Compiled by G. Thompson

SERVICE PARTS LIST

Chevrolet Pushbutton Model 987575

Illus. No.	Service Part No.	DESCRIPTION
ELECTRICAL PARTS		
Coils		
* 1	1221050	Antenna
2	7255738	Choke, antenna series
* 3	7268195	Choke, R. F. plate
* 4	1221050	R. F.
* 5	1221052	Oscillator
* 6	1221015	1st I. F. coil assembly
* 7	1221021	2nd I. F. coil assembly
* 8	7269881	Choke, input
9	1217846	Choke, dial light hash
10	1217846	Choke, filament hash
Capacitors		
11	7268558	Antenna Trimmer
12	6369	.000068 mfd, Ceramic
13	6366	.000039 mfd, Ceramic
14	7268479	Dual Trimmer
14A		R. F. Section
14B		Oscillator Section
15	7268904	.000200 mfd, Temp. Comp.
16	6612	.047 mfd 200 V., Tubular
17	6367	.000047 mfd, Ceramic
18	6367	.000047 mfd, Ceramic
19	6690	.1 mfd 50 volt, Tubular
20	6375	.000220 mfd, Ceramic
21	6631	.0047 mfd 200 volt, Tubular
*22	7269719	Electrolytic
22A		20 mfd 16 volt
22B		500 mfd 16 volt
22C		1000 mfd 16 volt
23	6611	.022 mfd volt, Tubular
26	6612	.047 mfd 200 volt, Tubular
27	6612	.047 mfd 200 volt, Tubular
28	6612	.047 mfd 200 volt, Tubular
29	6690	.1 mfd 100 volt, Tubular
30	6375	.000220 mfd, Ceramic
31	6375	.000220 mfd, Ceramic
32	1220885	Spark Plate
33	6692	.47 mfd 50 volt, Tubular
Resistors		
36	1235	1.0 megohm 1/2 watt
37	1237	1.5 megohms 1/2 watt
38	1137	10,000 ohms 1/2 watt
39	1249	15 megohms 1/2 watt
40	1233	680,000 ohms 1/2 watt
41	1217	33,000 ohms 1/2 watt
42	1235	1.0 megohms 1/2 watt
43	1239	2.2 megohms 1/2 watt
44	1235	1 megohm 1/2 watt
45	1232	560,000 ohms 1/2 watt
46	1219	47,000 ohms 1/2 watt
47	1128	1,800 ohms 1/2 watt
48	1214	18,000 ohms 1/2 watt
49	1227	220,000 ohms 1/2 watt
50	1224	120,000 ohms 1/2 watt
51	1245	6.8 megohms 1/2 watt
53	1130	2,700 ohms 1/2 watt
54	1231	470,000 ohms 1/2 watt
55	1103	15 ohms 1/2 watt
56	1120	390 ohms 1/2 watt
57	1108	39 ohms 1/2 watt
58	1112	82 ohms 1/2 watt
59	1101	10 ohms 1/2 watt
60	1188	120 ohms 2 watts
*61	7269709	.47 ohms 1 watt
*62	1189	150 ohms 2 watts

* Part first used in 1957.

SERVICE PARTS LIST

Chevrolet Pushbutton Model 987575 (con't.)

Illus. No.	Service Part No.	DESCRIPTION
Tubes and Transistors		
*	2N173	2N173 Transistor
*	12AF6	12AF6 Tube
*	12AD6	12AD6 Tube
*	12F8	12F8 Tube
*	12K5	12K5 Tube
Miscellaneous Electrical		
*64	1220963	Control, vol., tone and switch
65		Lamp, dial
*66	7269637	Potentiometer, transistor emitter
*67	7269877	Transformer, input
*68	1221045	Speaker, 6x9 PM
*69	7269870	Transformer, output
MECHANICAL PARTS		
Chassis		
*70	1221027	Connector, speaker & transistor collector
*71	1221023	Radiator, transistor heat
72	7239475	Socket, antenna
74	6075	Socket, 7 pin min. tube (printed circuit)
*75	7268822	Socket, 9 pin min. tube (printed circuit)
Tuner		
*80	7269250	Backplate, pointer
*81	1221032	Bell Crank Assembly
*82	7269666	Bushing, manual shaft
*83	1220976	Lever, clutch operating
*	1221061	Roller Pkg., clutch
*84	1220972	Clutch, gear and bushing
*85	1220973	Clutch Disc—driven
*86	7268626	Core Guide Bar
*87	7268078	Link, connecting, core bar
*88	7269842	Dial Light Assembly
*89	7269265	Escutcheon Assembly
*90	7269200	Dial
*91	7269205	Backplate, dial
*92	1221062	Finger Bar Pkg., declutching
*93	1220985	Gear, worm
*94	7269670	Key, manual shaft
*95	1221033	Pointer Assv.
*96	1220978	Link, pointer calibration adjustment
*97	1220984	Pushbutton, Front Bearing Plate and Slide (Set of 5 buttons)
*98	7268685	Sleeve, powdered iron
*99	7269207	Shaft, manual
*100	1220977	Spring, clutch
*101	1220975	Spring, pushbutton slide return (5)
*102	7268717	Spring, finger bar return
*103	7268072	Spring, connecting link
*104	7268687	Core, tuning, powdered iron
*105	7269547	Spring, manual shaft
Installation Parts		
	6030	Capacitor, generator
	6030	Capacitor, voltage regulator
	6030	Capacitor, ignition coil
*	2968360	Ground Strap
	455640	Fuse, 7.5 amperes
	6009	Static Collector, front wheel
*	7268741	Escutcheon, control knob—chrome
*	7268742	Escutcheon, volume—plastic
*	7268743	Escutcheon, selector—plastic
*	7268744	Knob, tone control
*	1990863	Knob, manual control
*	1990864	Knob, volume control
	7268738	Bracket, mounting
Hardware		
	6048	Nut, hex, bushing
*	7268723	Screw, set, treadle
	6082	Nut, hex
*	7268565	Grommet, antenna and R. F. coil
*	7268564	Grommet, oscillator coil
*	7268079	Spring, pivot, pointer

* Part first used in 1957.