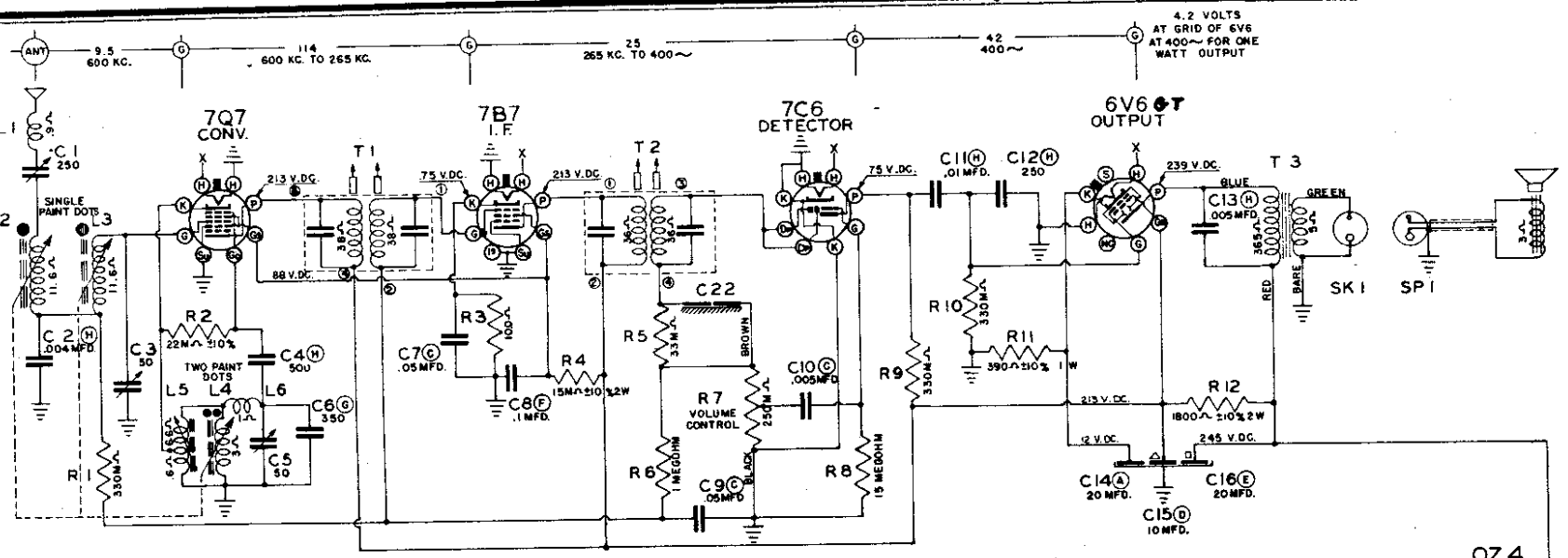


ALL CONDENSERS ARE MMFD. UNLESS OTHERWISE SPECIFIED

ON ALL CONDENSERS :

A = 25 VOLTS B = 120 VOLTS C = 200 VOLTS
D = 300 VOLTS E = 350 VOLTS F = 400 VOLTS
G = 500 VOLTS H = 600 VOLTS J = 1600 VOLTS

FOR RESISTORS: M = 1000 Ω E.G., 10M = 10 000 Ω
ALL RESISTORS ARE ½ WATT & ± 20% UNLESS OTHERWISE SPECIFIED

⏚ = DESIGNATES CHASSIS GROUND

ALL TUBE SOCKETS ARE BOTTOM VIEWS

STAGE GAINS

TAKEN AT ANT. SOCKET AT 600 KC. AND AT CONVERTER GRID AT 265 KC.

DUMMY ANTENNA

30 MMFD SERIES & 30 MMFD. SHUNT AT ANT. SOCKET & 0.1 MFD. SERIES TO CONVERTER GRID

BATTERY CONDITIONS

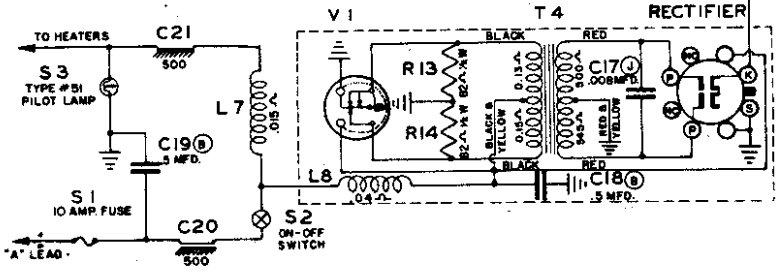
6.3 VOLTS AT STORAGE BATTERY TERMINALS WITH POSITIVE GROUNDED

TEST CONDITIONS

VOLUME CONTROL SET AT MAXIMUM WITH NO INCOMING SIGNAL

VOLTAGES READ FROM POINT SHOWN TO CHASSIS WITH 1000 OHM PER VOLT METER

SCHEMATIC DIAGRAM FOR 5 TUBE
CROSLEY 5MX080
I. F. 265 KC.
TUNING RANGE 540 KC. TO 1600 KC.



SENSITIVITY: ..... 10 microvolts at one watt output.

UNDISTORTED POWER OUTPUT: .....
2 watts measured at the voice coil.

MAXIMUM POWER OUTPUT: .....
4.25 watts measured at the voice coil.

SPEAKER: ..... 6" x 9" oval, instrument panel mounting.

CURRENT CONSUMPTION: ..... 5. amperes

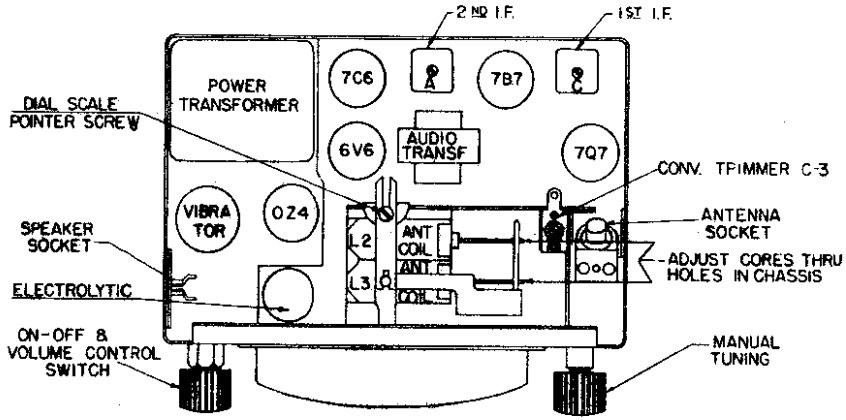


Fig. 7. Top View of Chassis

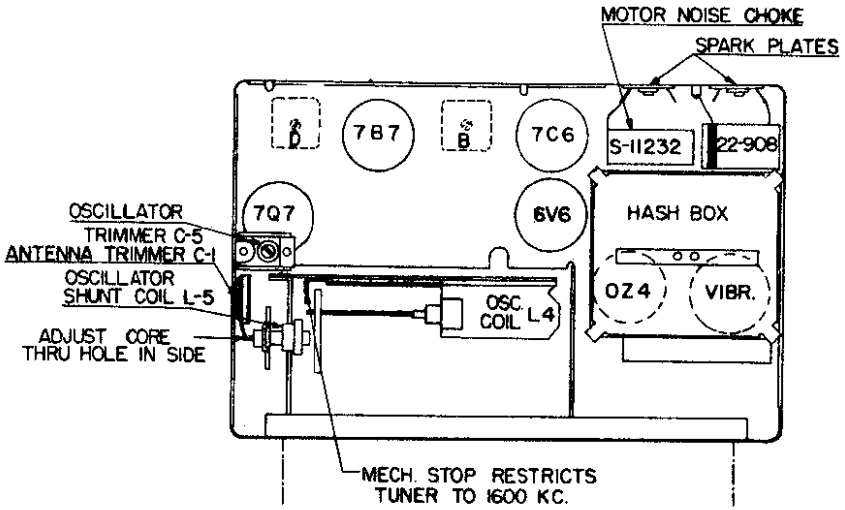


Fig. 8. Bottom View of Chassis

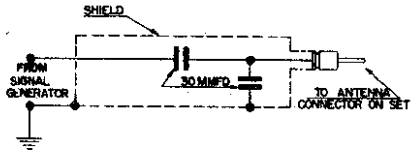


Fig. 9. Dummy Antenna

Fig. 9 shows the schematic of a recommended dummy antenna, closely resembling actual antenna capacity, to be used in series with signal generator leads when aligning the R.F. section of the receiver.

ALIGNMENT

Maximum performance depends on accurate alignment of the receiver; therefore follow these instructions carefully.

CAUTION: Make all alignment adjustments to the receiver with the volume control set at maximum. Reduce the signal intensity as much as possible at the signal generator. Connect the output meter across the voice coil.

I. F. ALIGNMENT PROCEDURE

1—Remove top and bottom covers from receiver.

2—Set signal generator to 265 Kc.

3—Apply signal from generator through a .1 Mfd. dummy to 7Q7 converter grid. (Pin No. 6 on socket.)

4—Adjust I.F. slugs A, B, C and D (Figs. 7 and 8), in the order named for maximum output. Repeat the operation to assure accurate alignment.

R. F. AND OSCILLATOR ALIGNMENT

1—Connect signal generator leads through dummy, illustrated in Fig. 9, to antenna lead in socket on receiver. This is important.

2—Set signal generator to 535 Kc.

3—Set dial to 535 Kc. (End of travel, against the stop.)

4—Adjust oscillator trimmer C-5 (Fig. 8) for maximum response.

5—Set signal generator to 1200 Kc.

6—Tune set to 1200 Kc.

7—Adjust converter trimmer C-3 (Fig. 7) and Ant. trimmer C-1 (Fig. 8) for maximum response.

8—If dial calibration is off after making above adjustments, a correction can be made by turning eccentric screw at fulcrum of dial pointer. (Fig. 7.)

CORE OR COIL REPLACEMENT ONLY

WARNING: The following adjustments are to be made ONLY if a core or coil is replaced.

1—Replace coil or core.

2—Set signal generator to 1675 Kc.

3—Connect signal generator leads through dummy, illustrated in Figure 9, to antenna receptacle on the receiver. This is important.

4—Set receiver dial to 1600 Kc. (maximum high frequency end of dial.)

5—Break cement loose on all cores and, using the special tuning wrench part No. S-13064, screw the core completely out of the antenna coil, the converter coil, and the oscillator coil.

6—Adjust oscillator trimmer C-5 (Fig. 8) at 1675 Kc.

7—Adjust converter trimmer C-3 and antenna trimmer C-1 (Fig. 7 and 8) for maximum output reading.

8—Replace cores to their approximate original position.

9—Set generator and receiver dial to 1200 Kc.

10—Adjust oscillator core L-4 (Fig. 8) to scale at 1200 Kc.

11—Adjust the two antenna cores L2 and L3 (Fig. 7) for maximum output reading. Do not adjust trimmers.

12—Set signal generator to 600 Kc.

13—If necessary, "rock in" shunt oscillator core L-5 (Fig. 8) for maximum output reading. This should be done only as a last resort, as the core has been set and sealed and should not require adjustment.

14—Check receiver at 1200 Kc. for calibration and gain. If the receiver is off scale or weak, repeat operations 9, 10 and 11.

15—After alignment is complete, the maximum high frequency tuning range should be checked. If the range is greater or less than 1605 Kc., the mechanical stop for the tuner cross arm should be bent to limit the frequency coverage to 1605 Kc.

After all adjustments have been made, glue core screws with speaker cement.

IMPORTANT: After reinstalling the receiver in the car, allow it to operate for approximately 15 minutes to reach normal operating temperature. Extend antenna to maximum. Check the antenna trimmer alignment on a weak station near 1200 Kc.

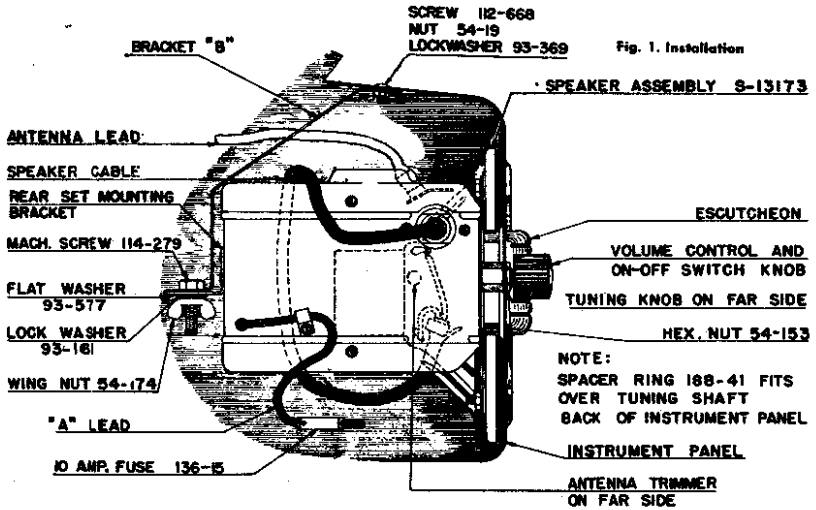


Fig. 1. Installation

RECEIVER INSTALLATION

Figures 1 and 2, illustrating the installed receiver, the escutcheon plate, and the control knobs, are given here to assist in the removal and reinstallation of this receiver when service is necessary.

To take the receiver from the car, remove the control knobs and mounting nuts from the front panel, and remove the wing-nut, 54-174, lock washer 93-161, flat washer 93-577, and machine screw 114-279 from the set mounting bracket "B."

The speaker is held to the rear of the panel by four hex. nuts.

OFF-ON SWITCH AND VOLUME CONTROL

To turn the receiver on, turn the volume control knob to the right until it dicks and the dial is illuminated. Allow the receiver to reach operating temperature. (Approximately 20 seconds.) To increase the volume, continue to rotate this knob to the right. To turn the receiver off turn the volume control knob to the left until it clicks. (Fig. 2.)

TUNING

Turn the tuning knob (Fig. 1) to tune in the desired station. Tune to the exact frequency to prevent distortion. The pointer in front of the illuminated dial scale indicates the frequency to which the receiver is tuned. (Fig. 2.)

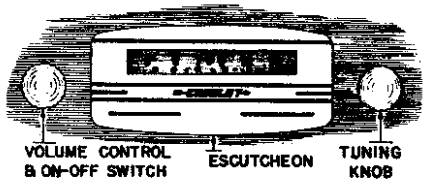


Fig. 2. Front View

CONDENSERS

C- 8	22-170	.1 mfd.	400 volt
C-12	22-182	250 mmfd.	600 volt
C- 9	22-250	.05 mfd.	200 volt
C- 4	22-716	500 mmfd.	600 volt
C-13	22-838	.005 mfd.	600 volt
C-10	22-906	.005 mfd.	200 volt
C-18			
C-19	22-908	.5 mfd.	120 volt
C-11	22-1170	.01 mfd.	600 volt
C-22	22-1076	Dual 250 mmfd.	100 volt
C- 7	22-250	.05 mfd.	200 volt
C- 2	22-1244	.004 mfd.	600 volt
C- 3	22-1376	Detector trimmer	
C- 5	22-1378	Oscillator trimmer	
C-14	22-1387	Dry electrolytic—20 mfd.—25 v. x	
C-15		10 mfd.—300 v. x 20 mfd.—	
C-16		350 volt	
C- 1	22-1420	Antenna trimmer	
C-17	22-1448	.008 mfd.	1600 volt
C- 6	22-1641	350 mmfd.	500 volt

RESISTORS

R- 4	63-942	15M ohm	2 watt insl.
R-12	63-1368	1800 ohm W.W.	2 watt insl.
R-11	63-1372	390 ohm W.W.	1 watt insl.
R- 6	63-1390	1 megohm	⅛ watt insl.
R- 5	63-1391	33M ohm	¼ watt insl.
R- 1			
R- 9	63-1392	330M ohm	¼ watt insl.
R-10			
R- 2	63-1395	22M ohm	¼ watt. insl.
R-13			
R-14	63-1399	82 ohm	½ watt insl.
R- 8	63-1400	15 megohm	⅛ watt insl.
R- 3	63-1414	100 ohm	¼ watt insl.
R- 7	63-1513	Vol. con. and sw.	

SPEAKER AND GASKET ASSEMBLY

	S13173	Speaker and gasket assem. (comp.)
SP-1	49-576	6" x 9" P.M. speaker
	196-91	Speaker gasket and screen
	208-576	Cone and voice coil assem.

INTERFERENCE ELIMINATION

There should be no interference from the ignition system if the receiver has been installed according to the instructions furnished with it. The interference suppression equipment may be checked for proper installation by referring to the following illustrations:

IMPORTANT: Be sure that good contacts are made between the car frame, or body, and the interference condensers. If necessary, clean away paint or dirt with emery paper. Be sure all nuts and bolts are tightened securely.

The distributor supressor No. 63-1046 and the flexible ground strap No. 83-1335 should be connected as shown in figure 3.

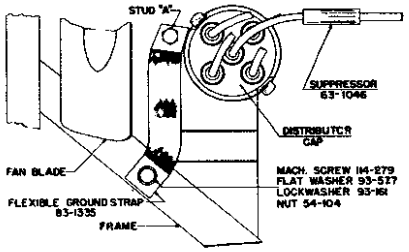


Fig. 3

The fuel gauge condenser No. 22-919 should be installed as shown in figure 4.

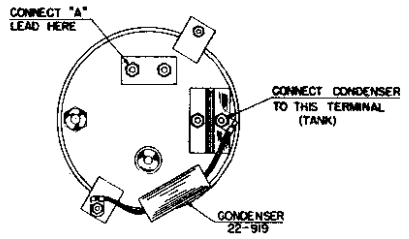


Fig. 4

MISCELLANEOUS

	52-294	Vol. con. cable
	52-397	Speaker cable and plug
	52-417	Battery cable (set to fuse)
	52-418	Battery cable (fuse to ammeter)
	54-184	Set spacer nut (used on 63-1513)
	78-281	Vibrator socket
	78-596	Loktal base tube socket (8 contact)
	78-684	Octal base tube socket (moulded)
	78-749	Speaker plug socket
	78-756	Loktal base tube socket
	78-758	Octal base tube socket
	93-456	Vibrator cushion washer
T-3	95-915	Output transformer
T-4	95-1002	Power transformer
S-1	136-15	10 amp. fuse (3AG)
V-1	190-20	Vibrator
	202-486	Instruction book
	S11391	Ant. con. socket and brkt. assem.

The generator condenser No. 22-920 should be installed as shown below in figure 5.

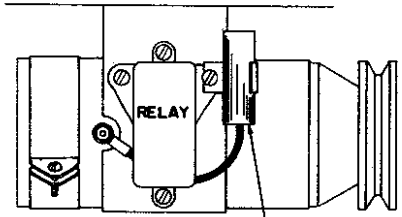


Fig. 5

The motor hood bond spring No. 80-145 should be installed as shown in Figure 6. Note that the sharp extrusions are facing down toward the front of the car before the hood grounding strip is bent back.

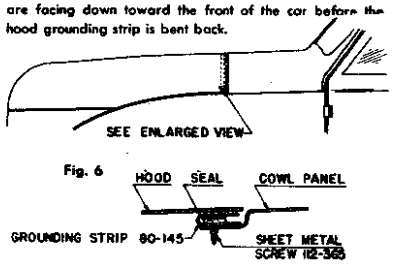


Fig. 6

DIAL AND TUNING MECHANISM ASSEMBLY

Diagram No.	Part No.	Description
	26-380	Dial scale
	57-1228	Escutcheon
	59-180	Dial pointer
	80-329	Gear indexing spring
	80-331	Cross arm return spring
	80-379	Pointer retainer spring
S-3	100-32	Dial light bulb
	149-44	Adjusting spring and core (3 used)
	188-45	Turret screw lock ring
	S10826	Solenoid end plug and brkt. assem.
	S12439	Pointer mtg. brkt. and stud assem.
	S12440	Pointer drive brkt. and stud assem.
	S12447	Dial light socket and wire assem.
	S12594	Manual tuner assem. (final)
	S13156	Tuning and vol. con. knob assem. (46-639 red)
	S13161	Tuning shaft and gear assem.
	S13162	Mtg. plate and retaining strip assem.
	S13178	Cross arm assem.
	S13238	Turret assem.

CHOKES AND COILS

L8	20-213	Main hash choke
T1	95-1003	1st I.F. transformer
T2	95-1004	2nd I.F. transformer
L1	S8819	Ant. motor noise choke assem.
	S11040	R. F. coil and shield assem.
L6	S11229	Osc. series coil assem.
L7	S11232	Motor noise choke coil assem.
L4	S12053	Osc. tuning coil assem.
L2, L3	S12060	R. F. coil tuning assem. (2 used)
L5	S13155	Osc. shunt coil assem.
	S13160	Ant. coil and shield assem.