

# PHILCO AUTO RADIO

## STUDEBAKER MODEL S-1926 CUSTOM AUTO RADIO

### MODEL S-1926 — ADJUSTMENTS

All padding adjustments are carefully made at the factory and ordinarily no readjustments are necessary. However, when readjustments are required, the procedure given below must be followed in detail.

**EQUIPMENT** — Fully charged heavy duty storage battery or 6 volt power pack, 077 or 177 Philco Signal generator, 027 Philco Vacuum tube voltmeter and set tester or audio output meter, 45-2610 Padding screw driver.

**GENERAL — VACUUM TUBE VOLTMETER.** The model 027 Vacuum tube voltmeter is an extremely sensitive and accurate test instrument and is recommended for use when aligning and adjusting auto radios. Connect the negative (—) terminal of the Vacuum Tube Voltmeter to the high side (ungrounded side) of the volume control. Connect the positive (+) terminal to the radio housing. Connect the "AC" cord to a 110 volt AC socket. Press the VTVM button and the 10 volt button. Turn the "Set Zero Ohms — VTVM" control clockwise until a click is heard. Allow the tubes to heat up for a few minutes. Short the 150 meg. VTVM terminals and adjust the "Set Zero Ohms — VTVM" control until the meter reads zero on the 0-10 range scale (green scale). The needle will deflect from right to left.

**AUDIO OUTPUT METER.** If an audio output meter is used connect the leads across the voice coil of the speaker. Use the 0-30 volt scale.

With the Radio and signal generator set up for operation at the prescribed frequency, turn the Radio volume control on full and set the signal generator attenuator so that a half scale reading is obtained on the meter. The signal in the speaker should be audible but not loud.

The shielding on the generator output lead must be connected to the Radio housing.

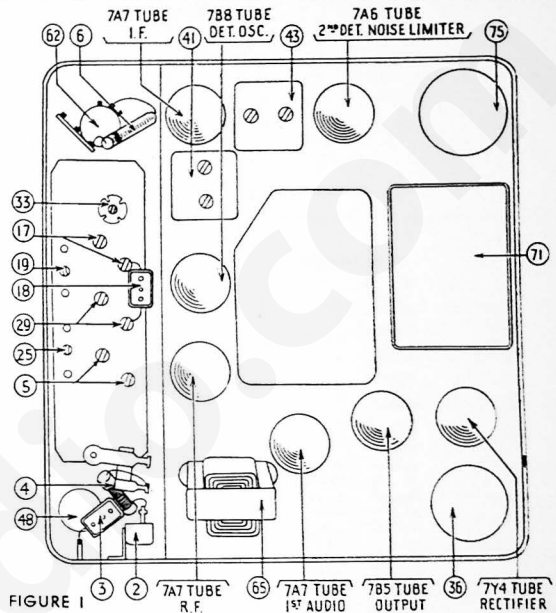


FIGURE 1

OPERATION	SIGNAL GENERATOR		DUMMY CAPACITY	SPECIAL INSTRUCTIONS	ADJUST PADDER
	FREQUENCY	CONNECTION			
1	PUSH IN THE TUNING CONTROL KNOB UNTIL STATIONS CAN BE TUNED IN BY MANUAL TUNING				
2	270 K.C.	To Aerial Receptacle on Radio	See Note 1	Note 2	33 35 40 42 33 35 40 42
3	1600 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Control at 1600 K.C.	33
4	1360 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Control at 1360 K.C.	3 18 Note 4
5	590 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Control at 590 K.C.	33 Note 3
6	1600 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Control at 1600 K.C.	33
7	1360 K.C.	To Aerial Receptacle on Radio	See Note 1	Set Tuning Control at 1360 K.C.	3 18 Note 4
8	1200 to 1400 K.C.	Note 5	Note 5	Note 5	3 Note 4

Make all adjustments for maximum reading on the meter.

**NOTE 1** — Connect the aerial lead, Part No. 95-0111, to the aerial receptacle in the radio. Connect a 35 Mmfd. Condenser in series between the signal generator and the aerial lead.

**NOTE 2** — Turn the tuning control clockwise as far as it will go.

**NOTE 3** — Rock the tuning control while adjusting the low frequency screw. Tune the control to the signal and adjust the screw for maximum output. Rotate the tuning control back and forth slightly for maximum output. Then readjust the screw for maximum

output. Repeat this procedure until no further improvement is noticed.

**NOTE 4** — When the aerial stage adjustment is made with the Radio installed in the car, the Radio aerial lead must be connected to the car aerial in the usual manner. Connect the signal generator output lead to a wire placed near the car aerial but not connected to it.

**NOTE 5** — When installing the radio in the car, follow the installation instructions carefully. Tune in a weak broadcast signal between 1200 and 1400 Kilocycles on the control scale. Remove the plug button on the end of the radio and adjust the aerial compensator ③ (see Figure 1) for maximum signal.

### INSTRUCTIONS FOR SETTING UP THE AUTOMATIC TUNING BUTTONS

Turn on the radio and allow it to operate for twenty minutes or longer if possible.

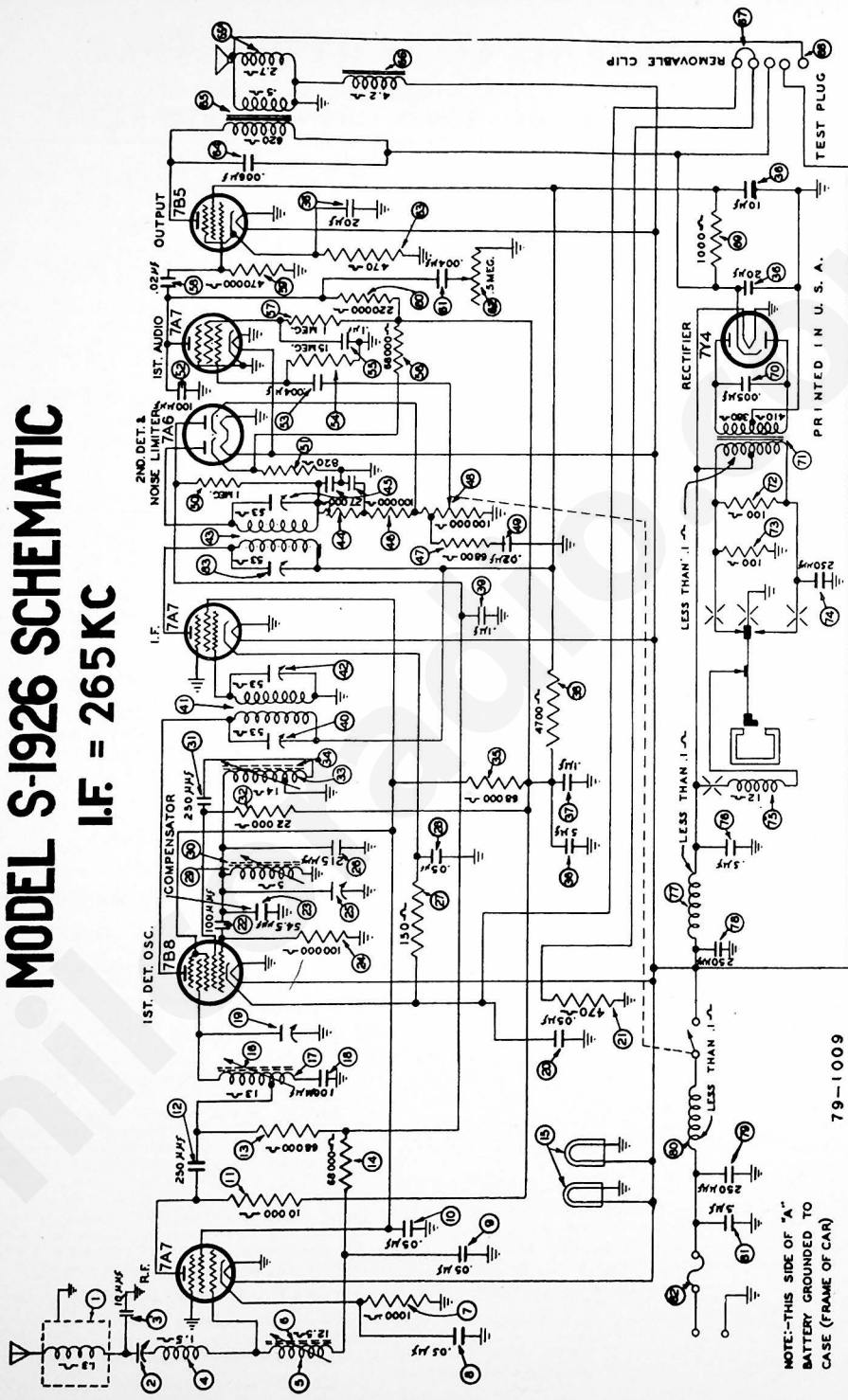
Press in any automatic button so that it remains engaged. Then tune in the station desired by turning the small wheel in the button. The station can be identified by the pointer, which indicates the frequency of the station in Kilocycles. The automatic buttons may be readjusted to any station within the range of the broadcast band. The automatic buttons may be readjusted to

stations in any sequence desired. However for convenience in remembering stations, it is recommended that the buttons be set up in the same order that the stations appear across the dial.

**CAUTION** — All adjustments must be carefully made so that reception can be received best when remote from the broadcasting station. Careless tuning off to one side, even though the signal is heard, will result in distorted reception.

# MODEL S-1926 SCHEMATIC

## I.F. = 265KC



NOTE:—THIS SIDE OF "A" BATTERY GROUNDED TO CASE (FRAME OF CAR)

FIGURE 2

79-1009

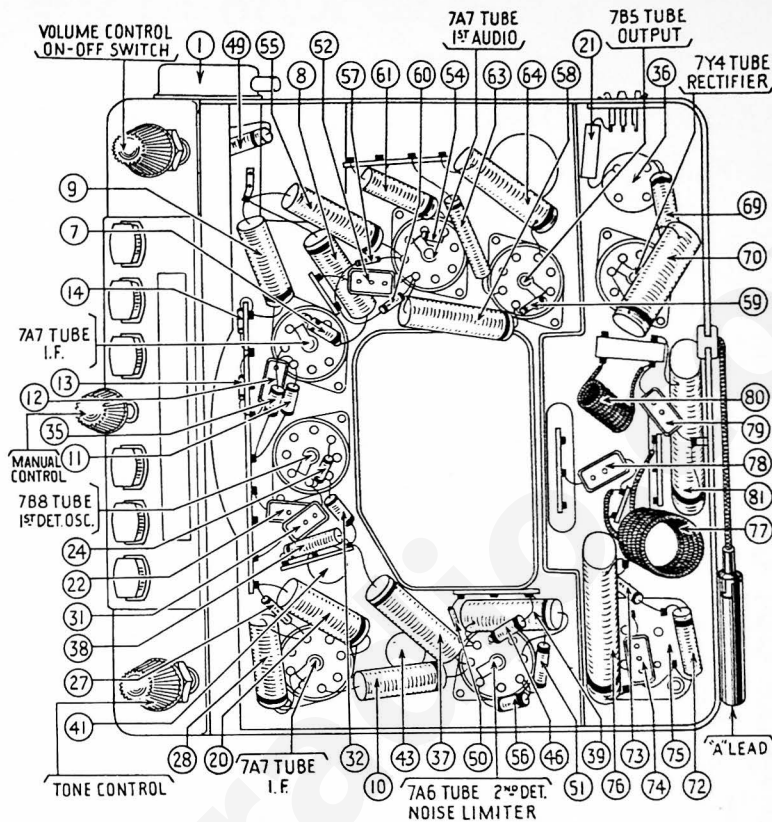


FIGURE 3

PARTS LIST — S-1926

No.	Description	Part No.	No.	Description	Part No.	No.	Description	Part No.	No.	Description	Part No.
(1)	Antenna Choke (on Housing)	65-0459	(36)	Filter Condenser (5-10-20-20 Mfd.)	61-0150	(66)	Field Coil	Not Replaceable		Wing Nut (Radio Mtg.)	97-0048FA3
(2)	Aerial Padder	63-0053	(37)	Condenser (.1 Mfd.)	61-0113	(67)	Jumper Plug	57-1121		Bezel (Radio Mtg.)	77-1023FA3
(3)	Condenser (10 Mmfd.)	60-010137	(38)	Resistor (4700 ohms)	33-247434	(68)	Test Socket	55-1387		Screw (Bezel to Tuning Unit)	92-0228FA3
(4)	Antenna Choke	65-0438	(39)	Condenser (.1 Mfd.)	61-0104	(69)	Resistor (1000 ohms)	33-210334		Screw (Bezel Mts.)	
(5)	Antenna Transformer	65-0349	(40)	Padder (Pri. 1st I. F. Trans.)	65-0349	(70)	Condenser (5000 Mmfd.)	61-0133		Screw (Cover Mts.)	W2212FA3
(6)	Antenna Transformer Core	57-1541	(41)	First I. F. Transformer	65-0352	(71)	Power Transformer	65-0247		Volume & Tone Knob	77-1043
(7)	Resistor (1000 ohms)	33-210334	(42)	Padder (Sec. 1st I. F. Trans.)	65-0418	(72)	Resistor (100 ohms)	33-110434		Tuning Knob	77-1028
(8)	Condenser (.05 Mfd.)	61-0101	(43)	Second I. F. Transformer	65-0418	(73)	Resistor (100 ohms)	33-110434		Push Button Knob	77-1042
(9)	Condenser (.05 Mfd.)	61-0101	(44)	Resistor (27,000 ohms)	33-327154	(74)	Condenser (250 Mmfd.)	60-125157		Tuning Switch	77-0970
(10)	Condenser (.05 Mfd.)	61-0101	(45)	Padder (Sec. 2nd I. F. Trans.)	65-0137	(75)	Vibrator	33-0026		Muter Switch	65-0360
(11)	Manual Control	33-310334	(46)	Resistor (100,000 ohms)	33-410334	(76)	Condenser (.5 Mfd.)	61-0137		Push Button Spring	57-1851
(12)	Condenser (250 Mmfd.)	60-125157	(47)	Resistor (100,000 ohms)	33-268154	(77)	Vibrator Choke	65-0151		Latch Bar Spring	57-1850
(13)	Resistor (68,000 ohms)	33-368154	(48)	Volume Control (100,000 ohms) & On-Off Switch	67-0036	(78)	Condenser (250 Mmfd.)	60-125157		Slide Take-up Spring	57-1649
(14)	Resistor (68,000 ohms)	33-368154	(49)	Condenser (.02 Mfd.)	61-0134	(79)	Condenser (250 Mmfd.)	60-125157		Manual Knob Spacer	57-1669
(15)	Pilot Lamp	34-2064	(50)	Resistor (1,000,000 ohms)	33-510154	(80)	"A" Choke	32-1644		Manual Knob Screw	37-1623FA3
(16)	R. F. Transformer	57-1541	(51)	Resistor (820 ohms)	33-182336	(81)	Condenser (.5 Mfd.)	61-0137		Manual Knob Spring	37-1623FA3
(17)	R. F. Transformer	65-0359	(52)	Condenser (100 Mmfd.)	60-110157	(82)	Fuse	45-2559		Nut Cover	77-1026
(18)	Condenser (100 Mmfd.)	61-110157	(53)	Condenser (1000 Mmfd.)	61-0179	(83)	Padder (Pri. 2nd I. F. Trans.)	65-0359		Speaker Unit	73-0053
(19)	R. F. Padder	63-0052	(54)	Resistor (15,000,000 ohms)	33-615154					Nut (Speaker Mtg.)	W121FA3
(20)	Condenser (.05 Mfd.)	61-0101	(55)	Condenser (.1 Mfd.)	61-0104					Nut (Speaker Mtg.)	W182FA3
(21)	Resistor (470 ohms)	33-147336	(56)	Resistor (68,000 ohms)	33-368334					Lockwasher (Speaker Mtg.)	W291FE3
(22)	Condenser (100 Mmfd.)	60-110127	(57)	Resistor (1,000,000 ohms)	33-510154					Vibrator Socket	27-6151
(23)	Condenser (54.5 Mmfd.)	61-0149								"A" Switch Cable	95-0229
(24)	Resistor (100,000 ohms)	33-410154								"A" Lead	77-0838
(25)	Oscillator Padder	63-0055								Fuse Lead	77-0052
(26)	Condenser (215 Mmfd.)	61-0111								Volume & Tone Control Nut	W684
(27)	Resistor (150 ohms)	33-113336								Hook Bolt (Radio Mtg.)	97-0135FA3
(28)	Condenser (.05 Mfd.)	61-0111								Nut (Radio Mtg.)	97-0292FA3
(29)	Oscillator Transformer	65-0350									
(30)	Oscillator Transformer Core	57-1542									
(31)	Condenser (250 Mmfd.)	60-125157									
(32)	Resistor (22,000 ohms)	33-322334									
(33)	Oscillator Tracking Coil	65-0351									
(34)	Oscillator Tracking Coil Core	57-1859									
(35)	Resistor (68,000 ohms)	33-368334									
			(36)	Filter Condenser (5-10-20-20 Mfd.)	61-0150						
			(37)	Condenser (.1 Mfd.)	61-0113						
			(38)	Resistor (4700 ohms)	33-247434						
			(39)	Condenser (.1 Mfd.)	61-0104						
			(40)	Padder (Pri. 1st I. F. Trans.)	65-0349						
			(41)	First I. F. Transformer	65-0352						
			(42)	Padder (Sec. 1st I. F. Trans.)	65-0418						
			(43)	Second I. F. Transformer	65-0418						
			(44)	Resistor (27,000 ohms)	33-327154						
			(45)	Padder (Sec. 2nd I. F. Trans.)	65-0137						
			(46)	Resistor (100,000 ohms)	33-410334						
			(47)	Resistor (100,000 ohms)	33-268154						
			(48)	Volume Control (100,000 ohms) & On-Off Switch	67-0036						
			(49)	Condenser (.02 Mfd.)	61-0134						
			(50)	Resistor (1,000,000 ohms)	33-510154						
			(51)	Resistor (820 ohms)	33-182336						
			(52)	Condenser (100 Mmfd.)	60-110157						
			(53)	Condenser (1000 Mmfd.)	61-0179						
			(54)	Resistor (15,000,000 ohms)	33-615154						
			(55)	Condenser (.1 Mfd.)	61-0104						
			(56)	Resistor (68,000 ohms)	33-368334						
			(57)	Resistor (1,000,000 ohms)	33-510154						
			(58)	Condenser (.02 Mfd.)	61-0108						
			(59)	Resistor (470,000 ohms)	33-447154						
			(60)	Resistor (220,000 ohms)	33-422154						
			(61)	Condenser (4000 Mmfd.)	61-0179						
			(62)	Tone Control (500,000 ohms)	67-0056						
			(63)	Resistor (470 ohms)	33-147336						
			(64)	Condenser (8000 Mmfd.)	61-0105						
			(65)	Output Transformer	65-0364						
			(65a)	Replacement Cone (For 73-0053-3 Speaker)	91-0166						