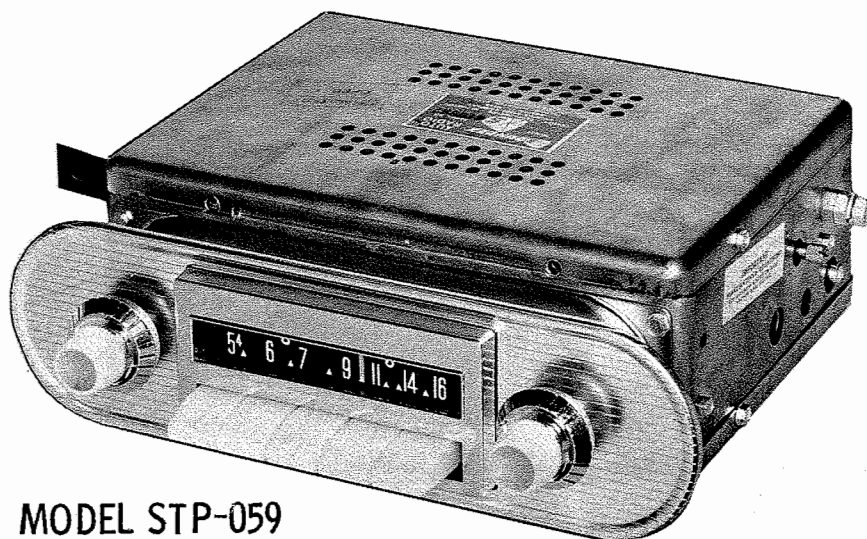


SOUNDEX MODELS COM-60,
COP-60, STM-059, STP-059

MODEL STP-059

TRADE NAME Soundex Models COM-60, COP-60 (For 1960 Corvairs) STM-059, STP-059 (For 1959 Studebaker Larks)
 MANUFACTURER Soundex Radio Co., 959 Commonwealth Ave., Boston 15, Mass.
 TYPE SET Battery Operated, 4-Tube - 2-Transistor, Custom-Built Automobile AM Receiver
 POWER SUPPLY 12 Volt Storage Battery RATING 1.2 Amp. @ 12.6 Volts DC
 TUNING RANGE—BROADCAST 540-1600KC

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading.

Suggested Alignment Tools:

- A1, thru A4..... GENERAL CEMENT #5097, 8727
 WALSCO #2515
 A5, A6..... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538
 A8, A9, A10..... GENERAL CEMENT #9050-L, 9150
 WALSCO #2521, 2524

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	High side thru .1mfd to pin 7 (grid) of Converter. Low side to chassis.	265KC (400% Mod.)	High end stop.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1500KC	1500KC	"	A5, A6, A7	"
3.	"	600KC	600KC	"	A8, A9, A10	"
4.	With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.					

PUSHBUTTON ADJUSTMENT

1. Tune manually to desired station.
2. Pull pushbutton out, then press in firmly.
3. Repeat for remaining pushbuttons.

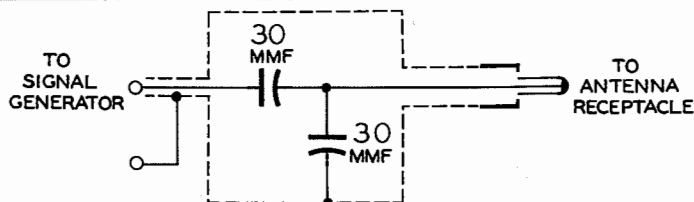


FIG.1

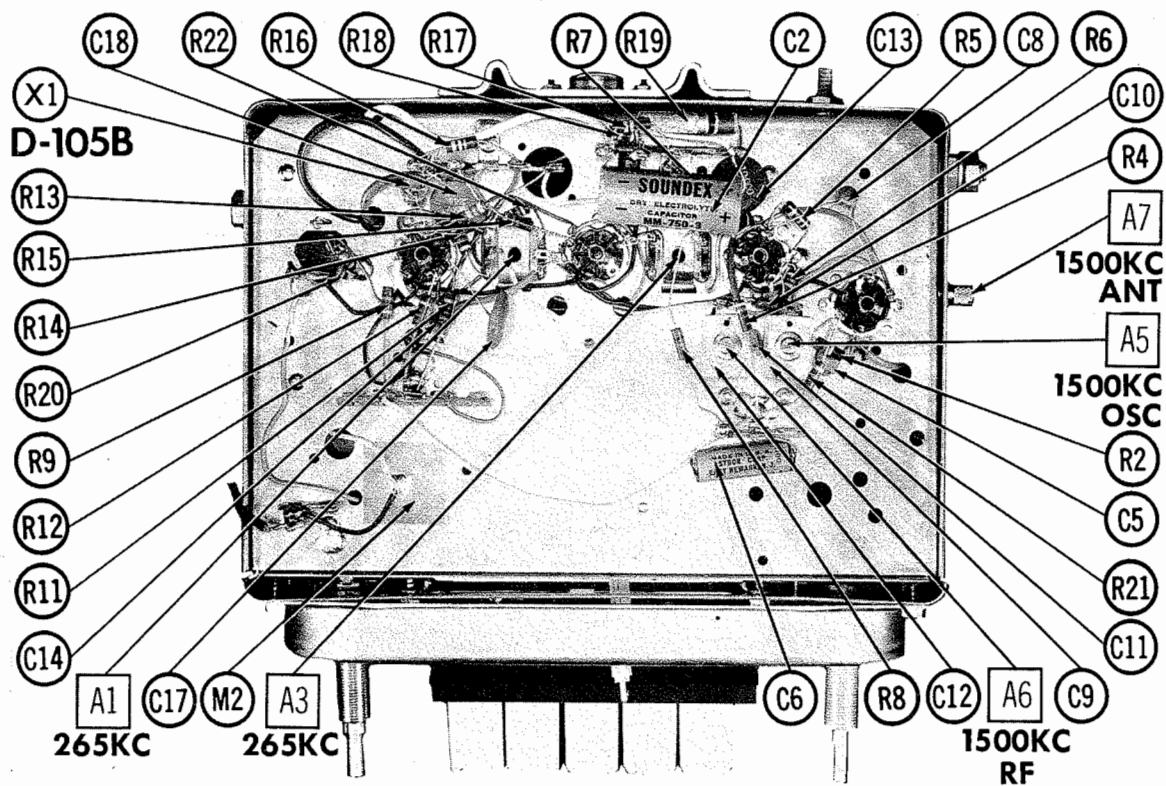
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of KD985

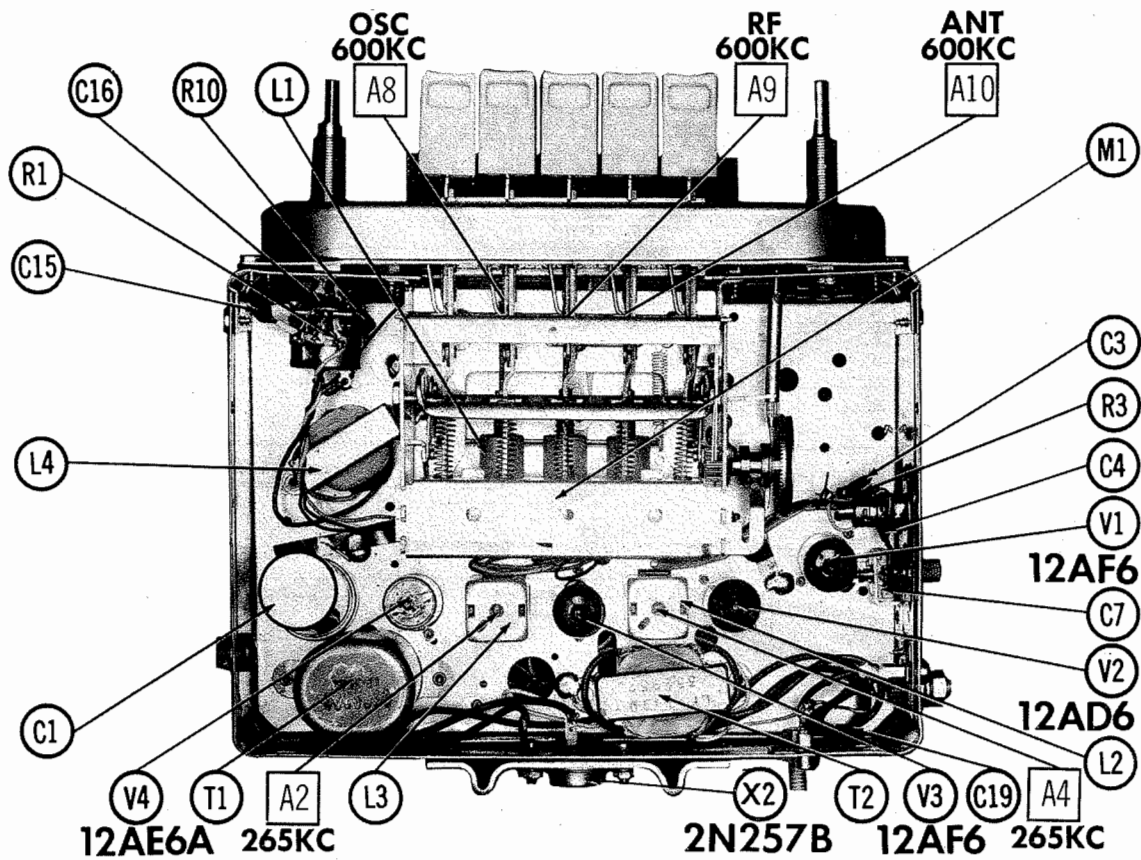
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SOUNDEX MODELS COM-60,
COP-60, STM-059, STP-059

SET 571 FOLDER 13



CHASSIS BOTTOM VIEW



CHASSIS TOP VIEW

PARTS LIST AND DESCRIPTIONS

TUBES

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	RF Amplifier	12AF6 (12BL6)*	V3	IF Amplifier	12AF6 (12BL6)*	V4	Det. -AVC-AF Amplifier	12AE6A
V2	Converter	12AD6						

* Used in Models COP-60, COM-60

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	D-105B	Driver			PNP
X2	2N257B	Output			PNP Note 1

Note 1. When replacing, apply silicone grease between transistor and heat sink. Tighten mounting screws securely.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	SOUNDEX PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	500	15	Note 1	PWH2-02-40		XC3-48	WP200.8	TVLS-2157*
B	500	15						
C2	750	3		PRS1130	BRI000-6	QT1-32	PETA190	TVAS-1097*

Note 1. C1B is 150mfd in some versions of COM-60 and COP-60.

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C3	100		DI-100	DD-101	LI0T1	CCD-101	GP310	10TS-T10
C4	40		DI-39	DD-390	LI0Q39	CCD-390	GP439	10TS-Q39
C5	.003		DI-3000	DD-302	BYA10D3	CCD-302	GP230	10TS-D30
C6	.05 200V		P286N-05	DD-503	CUB285	4DP-3-503	GEM-415	2TM-550
C7	25-280					464		
C8	12 10%		DI-12	DD-120	LI0Q12	CCD-120	GP412	10TS-Q12
C9	25-280					464		
C10	40		DI-39	DD-390	LI0Q39	CCD-390	GP439	10TS-Q39
C11	51		DI-50	DD-510	LI0Q51	CCD-500	GP450	10TS-Q50
C12	25-280					464		
C13	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C14	27		DI-27	DD-270	LI0Q27	CCD-270	GP427	

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C15	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C16	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C17	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C18	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C19	.003		DI-3000	DD-302	BYA10D3	CCD-302	GP230	10TS-D30

Note 1. Not used in some versions.

CONTROLS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			SOUNDEX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
RIA	Tone	2meg	R213	F1-67, R2-60, AK-26, KR-1		↑ QJ-1555A	
B	Volume & Switch	1meg 500K Tap					

† "CONCENTRIKIT" Equivalent K-8 Kit with Base Elements and Shafts:
 B11-139, P17-126 (Panel)
 B19-137X, R1-207 (Rear)
 76-1 (Switch)
 S8 (Bushing)

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R2	150K				R13	470K			Note 1
R3	1.2meg				R14	4700Ω			(6800Ω)*
R4	4.7meg				R15	220Ω			
R5	2.2meg				R16	12K			Note 1
R6	47K				R17	330Ω			
R7	10meg				R18	22Ω			
R8	10meg			(2.2meg)*	R19	10Ω 2W			
R9	1.2meg				R20	120Ω			(68Ω)*
R10	100K				R21	1500Ω			
R11	2.2meg				R22	4700Ω			Note 1
R12	150Ω			(120Ω)*					

* Alternate Value.

Note 1. Not used in some versions.

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		SOUNDEX PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1A	Ant.						
B	RF						
C	Osc.						
L2	Input IF		BC-350	I2-H1	RTC-8638	T604	
L3	Output IF		BC-354	I2-H6	RTC-8640	T606	

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000 CY)	SOUNDEX PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
L4	1.2A	.6Ω	.008HY						

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	SOUNDEX PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	10	1	LF-3522					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	SOUNDEX PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	20Ω	3-4Ω	LF-1740					

SPEAKER

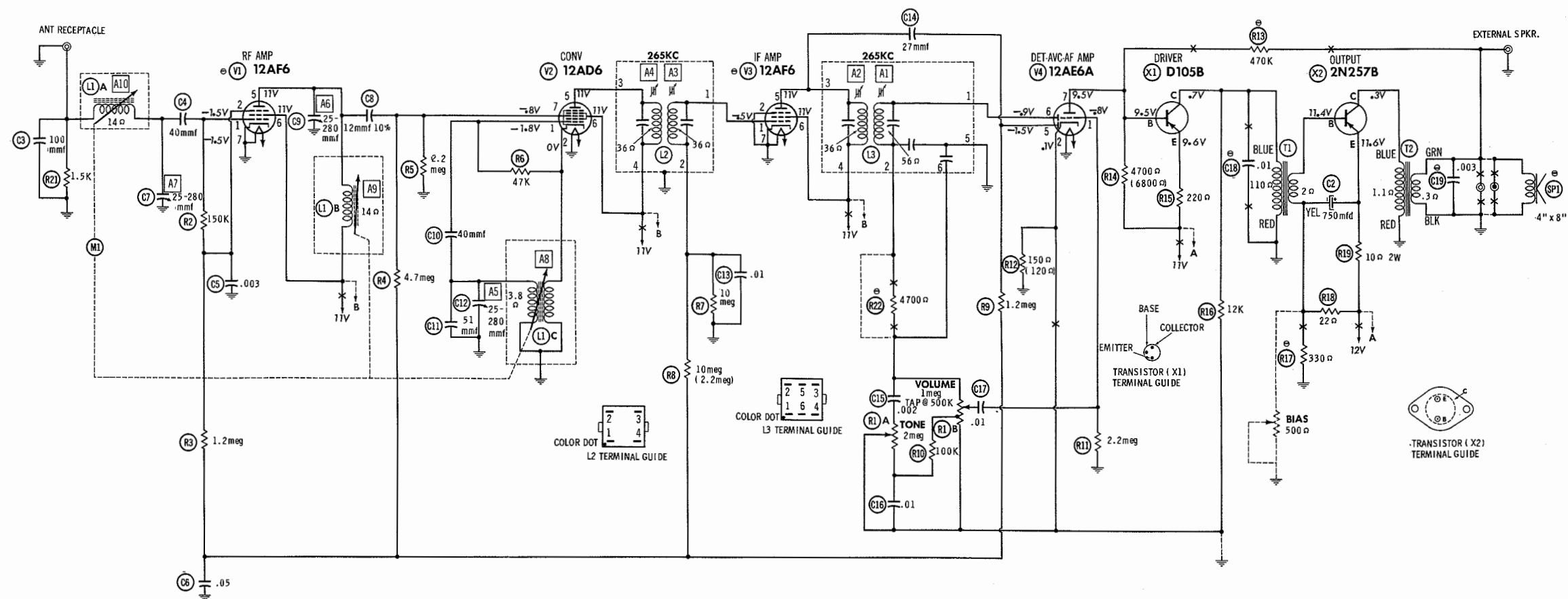
ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	SOUNDEX PART No.	QUAM PART No.	
SP1	4"x 8"	PM	3-4Ω	SK12	48A2	Models STP-059, STM-059
	6"x 9"	PM	3-4Ω		69A3	Models COP-60, COM-60

MISCELLANEOUS

ITEM No.	PART NAME	SOUNDEX PART No.	NOTES
M1	Tuner		Pushbutton Type
M2	Spark Plate		

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in Ten Colors
Shielded Hook-up Wire	8524 (Stranded) Available in Ten Colors
Bonding Strap	Use BELDEN No. 8885
	Use BELDEN No. 8661



RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V1	12AF6	5.1 meg	5 meg	FIL	FIL	120 Ω	100 Ω	0 Ω
V2	12AD6	47K	.1 Ω	FIL	FIL	140 Ω	100 Ω	2 meg
V3	12AF6	6.3 meg	0 Ω	FIL	FIL	160 Ω	100 Ω	0 Ω
V4	12AE6A	2.2 meg	120 Ω	FIL	FIL	6 meg	1 meg	

TRANSISTOR CIRCUIT RESISTANCE FOR X1 AND X2 NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

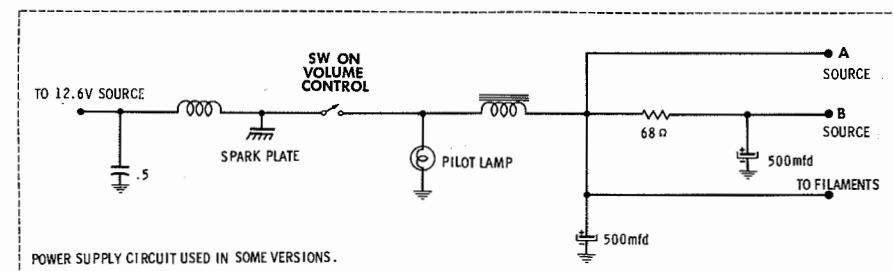
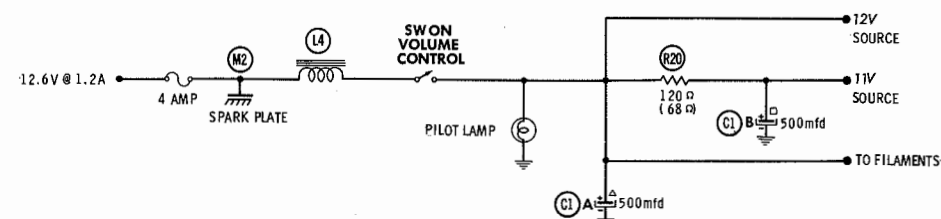
SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Battery voltage maintained at 12.6 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

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POWER SUPPLY CIRCUIT USED IN SOME VERSIONS.

SOUNDEX MODELS COM-60,
COP-60, STM-059, STP-059