

WAVE BAND SWITCH-PB42002
SHOWN IN BC POSITION

SPARTON SUPERHETERODYNE MODEL 7-46 & 7-46 PA. & 846 & 846 PA

INTERMEDIATE FREQUENCY 456K.C.

BOTTOM VIEWS OF ALL SOCKET CONNECTIONS

SWITCH WAFERS IDENTIFIED BY
NUMBERING FROM SHAFT END
FRONT VIEW OF WAFER INDICATED
BY LETTER 'P' REAR VIEW BY
LETTER 'R'

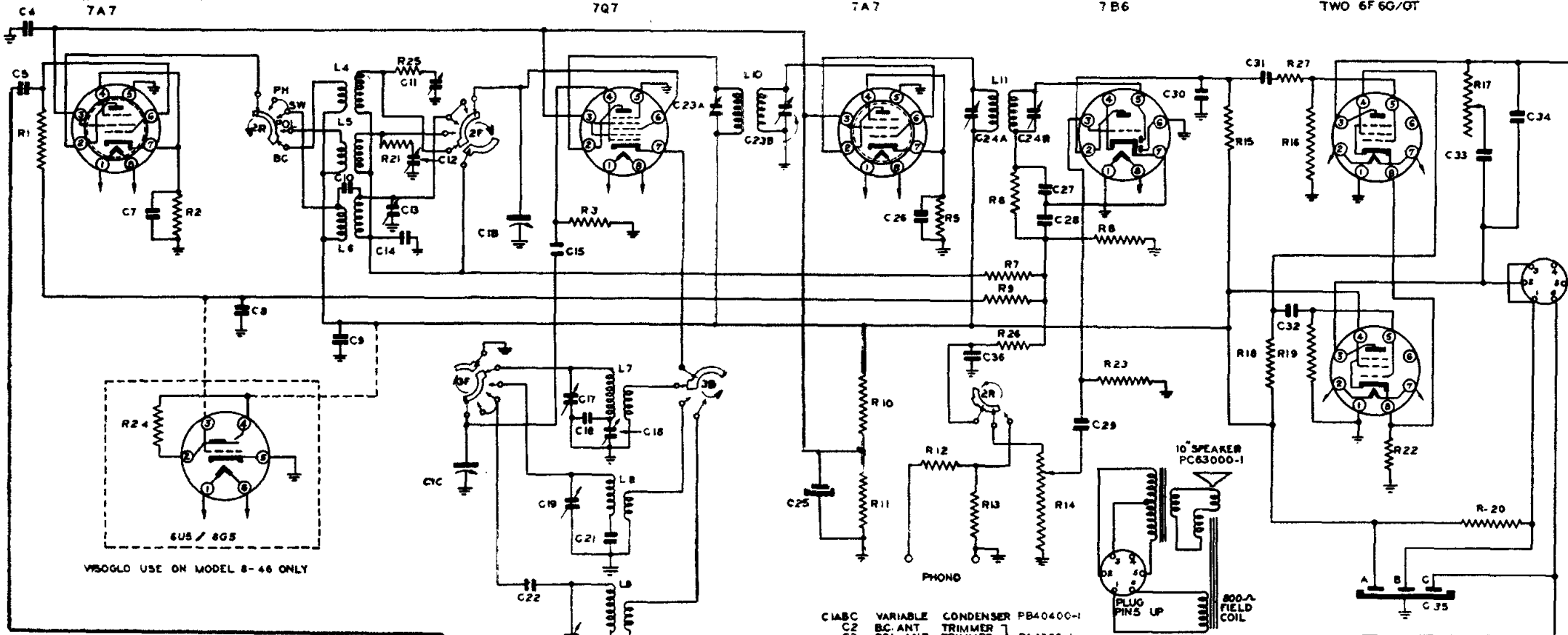
RF AMP
7A7

OSC. & CONV.
7Q7

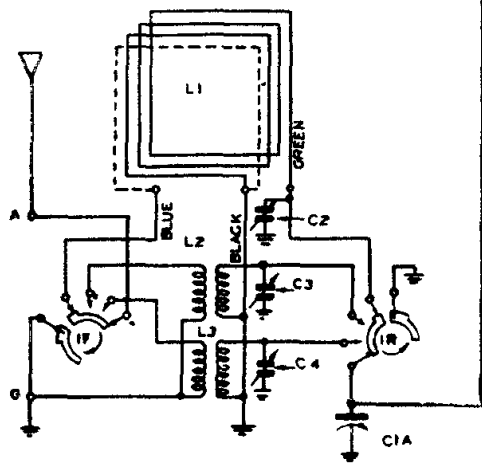
IF AMP
7A7

DET AVC & 1ST AUDIO
7B6

PUSH PULL OUTPUT
TWO 6F60/OT

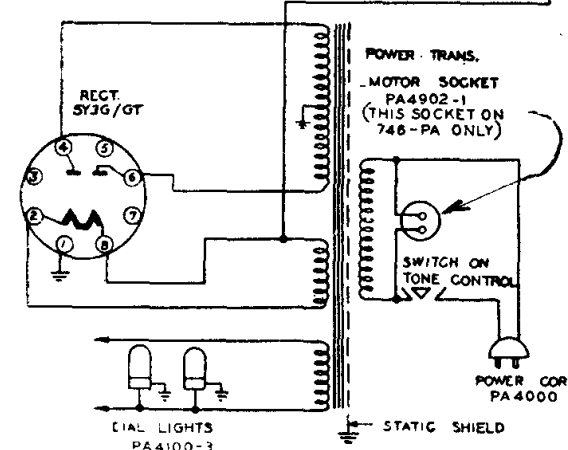


6U5/8G5
USE ON MODEL 8-46 ONLY



R1	1 MEGOHM	5W	BR125-105
R2	220 Ω	5W	BR125-821
R3	20000 Ω	5W	BR125-203
R5	500 Ω	5W	BR125-561
R6	18000 Ω	5W	BR125-183
R7	3.3 MEGOHM	5W	BR125-335
R8	180000 Ω	5W	BR125-184
R9	3.3 MEGOHM	5W	BR125-335
R10	16000 Ω	2W	OR12G-163
R11	22000 Ω	1W	CR12G-223
R12	270000 Ω	5W	BR125-274
R13	270000 Ω	5W	BR125-274
R14	2 MEGOHM VOL. CONT.		PA4401-2
R15	270000 Ω	5W	BR125-274
R16	470000 Ω	5W	BR125-474
R17	25 MEG. TONE CONT. & SW		PA4404-1
R18	2000 Ω	5W	BR12G-202
R19	470000 Ω	5W	BR125-474
R20	1000 Ω	5W	OR12S-102
R21	150 Ω	5W	BR125-151
R22	240 Ω	2W	DR12G-241
R23	10 MEGOHM	5W	BR125-106
R25	330 Ω	5W	BR125-331
R26	18000 Ω	5W	BR125-183
R27	1000 Ω	5W	BR125-102
R28	FOR 8-46 ADD		
R24	1 MEGOHM	5W	BR125-105

COMPONENT	VALUE	TYPE	PART NO.
C1	BC ANT.	TRIMMER	PA4358-1
C2	5W ANT.	TRIMMER	
C3	240 MMF	MICA	MC60G-241
C4	.05 MFD	200V	PC40HL-503
C5	.05 MFD	200V	PC40HL-503
C6	.05 MFD	200V	PC40HL-503
C7	.05 MFD	400V	PC40HL-503
C8	.05 MFD	200V	MC60G-050
C9	.05 MFD	200V	MC60G-050
C10	5 MMF	MICA	PA4358-2
C11	BC DET.	TRIMMER	
C12	PGL DET.	TRIMMER	
C13	5W DET.	TRIMMER	
C14	.05 MFD	200V	PC40HL-503
C15	51 MMF	MICA	MC60F-510
C16	240 MMF	MICA	MC60G-241
C17	BC OSC.	TRIMMER	AB43503-36
C18	BC OSC.	PADDER	
C19	POL. OSC.	TRIMMER	PA4357-1
C20	5W OSC.	TRIMMER	
C21	1680 MMF	MICA	PA4354-2
C22	330 MMF	MICA	PA4354-1
C23A	NO 1 IF	TRIMMER	AB43500-44
C24A	NO 2 IF	TRIMMER	AB43500-55
C25	4 MFD	400V ELECT	PC40HL-503
C26	.05 MFD	200V	MC60F-101
C27	100 MMF	MICA	MC60F-101
C28	100 MMF	MICA	MC60F-101
C29	.02 MFD	200V	PC40GL-203
C30	100 MMF	MICA	MC60F-101
C31	.05 MFD	400V	PC40GL-503
C32	.05 MFD	400V	PC40GL-503
C33	.02 MFD	600V	PC40GM-203
C34	.02 MFD	600V	PC40GM-203
A	15 MFD	450V	PA4300-1
C35B	10 MFD	450V	
C	15 MFD	450V	
C36	100 MFD	MICA	MC60F-101



DIAL LIGHTS
PA4100-3

POWER TRANS.

MOTOR SOCKET

PA4902-1

(THIS SOCKET ON

746-PA ONLY)

SWITCH ON

TONE CONTROL

POWER CORD

PA4000

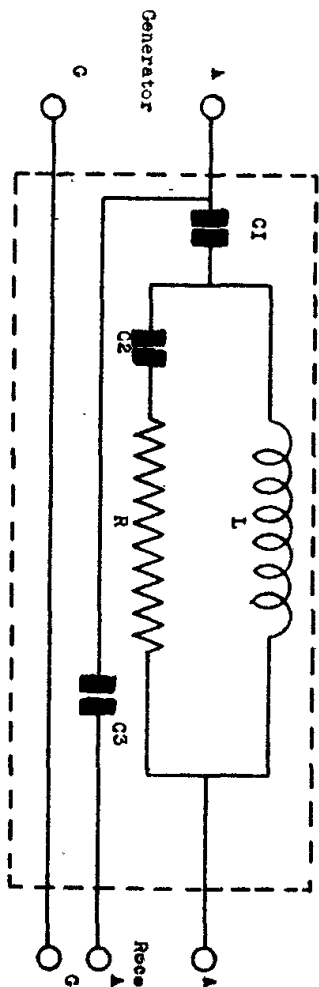
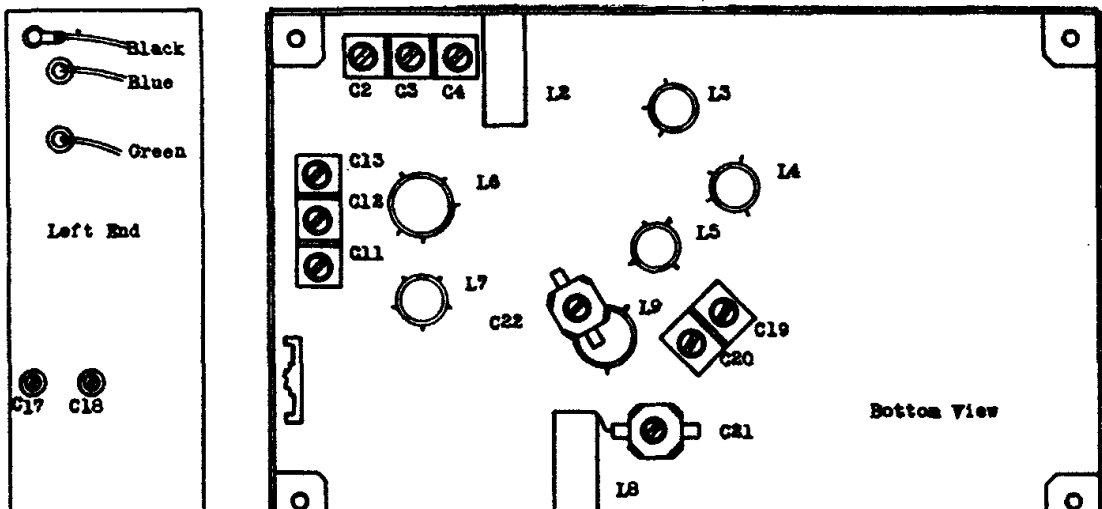
STATIC SHIELD

Sparton Superheterodyne Model

7-46 & 7-46-PA & 846 & 846-PA

OPER- ATION	ALIGNMENT OF	GENERATOR CONNECTED TO	DUMMY ANTENNA	GENERATOR FREQUENCY	BAND SWITCH SETTING	TUNING CONDENSER SETTING	TRIMMERS	REMARKS
1	Set dial pointer even with stop line when condenser gang is fully meshed.							
2	I.F.	*	1.mf cond.	456KC	BC	Open	C24 A&B	Peak Accurately
							C23 A&B	" "
3	Broadcast Band	Ant.	See note	1500KC	BC	1500KC	C17 Osc.Trim	" "
							C11 Det.Trim	" "
							C2 Ant.Trim	" "
4				600KC	BC	600KC	C18 Osc. Pad.	Rock **
5	(Repeat operation 3).							
6	Check Calibration at 600 KC, 1000 KC and 1500 KC.							
7	Police Band	Ant.	See note	5 MC	Police Band	5 MC	C19 Osc.Trim	Peak Accurately
							C12 Det.Trim	Rock **
							C3 Ant.Trim	Rock **
							C21 Osc.Pad	See operation #8
8	Oscillator Padder C21 is precision set at the factory and should not be readjusted in the field.							
9	(Repeat operation 7).							
10	Check Calibration at 1.8 MC and 5 MC.							
11	SW Band	Ant.	See note	18 MC	SW Band	18 MC	C20 Osc.Trim	Peak Accurately
							C13 Det.Trim	Rock **
							C4 Ant.Trim	Rock **
							C22 Osc.Pad	See operation #12
12	Oscillator Padder C22 is precision set at the factory and should not be readjusted in the field.							
13	(Repeat operation 11).							
14	Check Calibration and nt 6 MC and 18 MC.							
15	Check operations 1 to 11 inclusive.							

NOTES: Use Dummy Antenna as described.
 * Connect generator to pin #6 on 7Q7 Osc-conv. tube.
 ** Rock dial while adjusting for maximum output.



DUMMY ANTENNA

C1 - 200 muf. Condenser 400 V.D.C.
 C2 - 400 muf. Condenser 400 V.D.C.
 C3 - .02 muf. Condenser 400 V.D.C.
 R - 100 Ohms Resistor 1/4 Watt
 L - 20 Microhenrys Choke
 --- Case Shield
 Choke Coil Specifications
 Tubing - 3/8" diameter bakelite
 Wire - No. 38 Enameled
 Turns - 59 closely wound (Impregnated)

Line Voltage: 117 Volts A.C.

Position of Volume Control: Pull with dial tuned to
 Position of Band Switch: Broadcast
 Quiet Channel

TUBE	FUNCTION	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
7A7	R. F. Amp.	0	230	63	2.8	0	**	2.8	6*
7Q7	Osc-Conv.	0	230	63	-6	0	-6	*	6*
7A7	I. F. Amp.	0	230	63	2.3	0	**	2.3	6*
7B6	Det-AVC-1st Audio	0	100	**	0	**	0	0	6*
6F6	Push Pull Output	0	0	247	220	**	**	6*	14
6F6	Push Pull Output	0	0	247	227	**	**	6*	14
5Y3	Rectifier	0	325	0	320*	0	320*	0	325

Position of Volume Control: Pull with dial tuned to
 Position of Band Switch: Broadcast
 Quiet Channel

NOTES: Voltage readings are for schematic diagram in this bulletin. Allow 15% + or - on all measurements.
 Always use meter scale which will give greatest deflection within scale limits. All DC measurements
 made with 20,000 ohms per volt voltmeter. All AC voltages made with rectifier type voltmeter.
 * AC Volts.
 ** Cannot be measured with 20,000 Ohms per volt voltmeter.