

# Vivitar.

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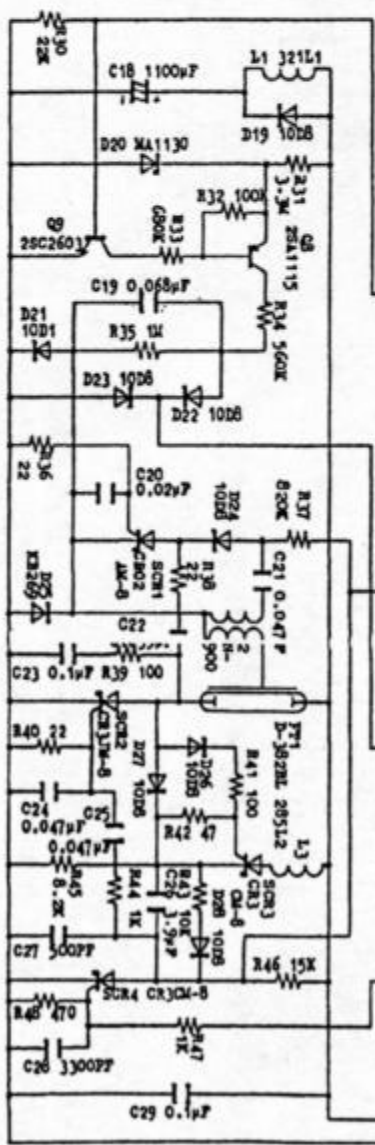
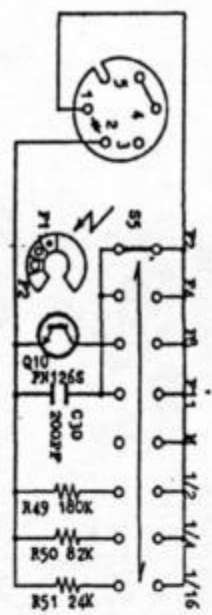
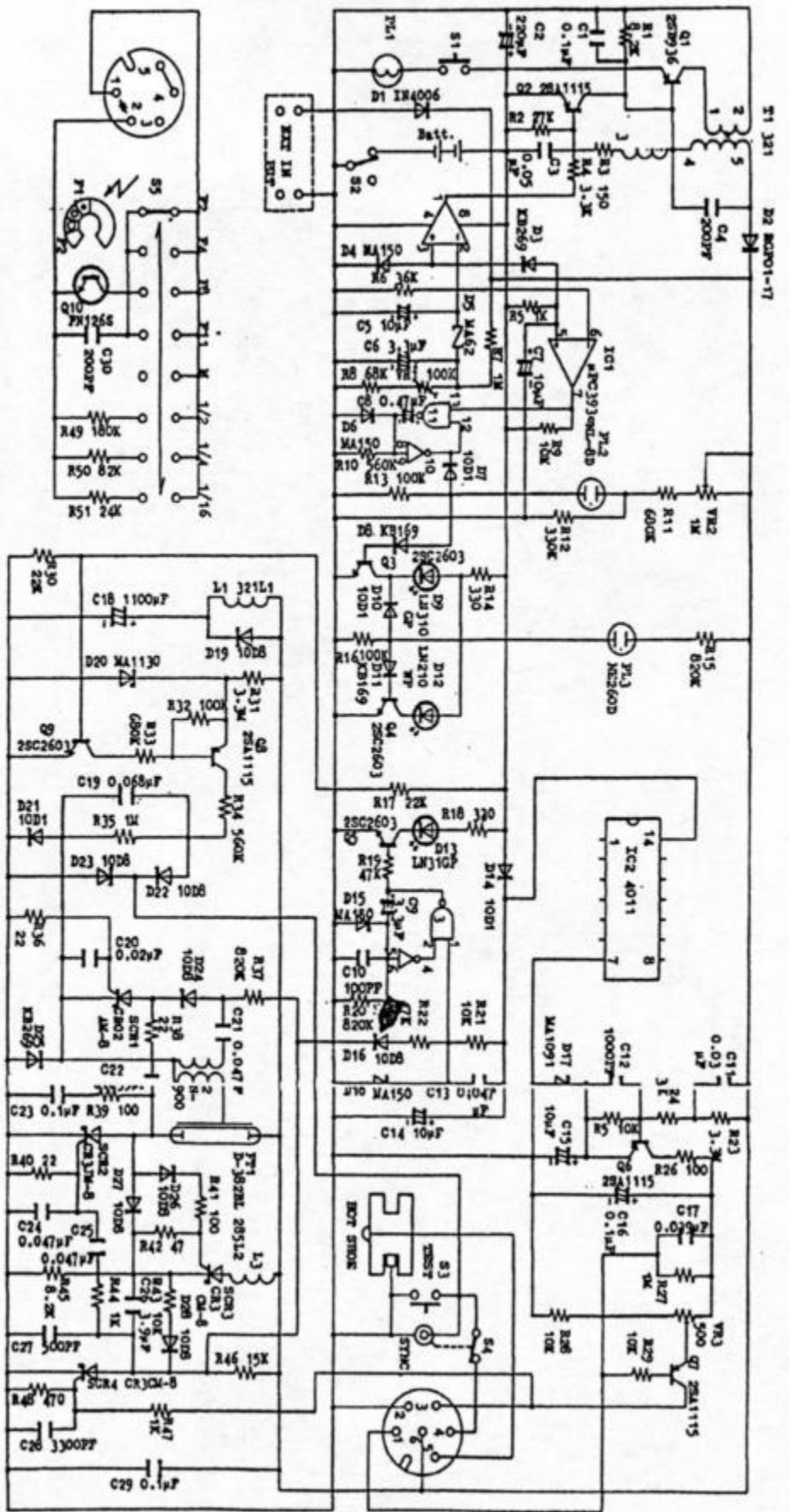
## Service Manual



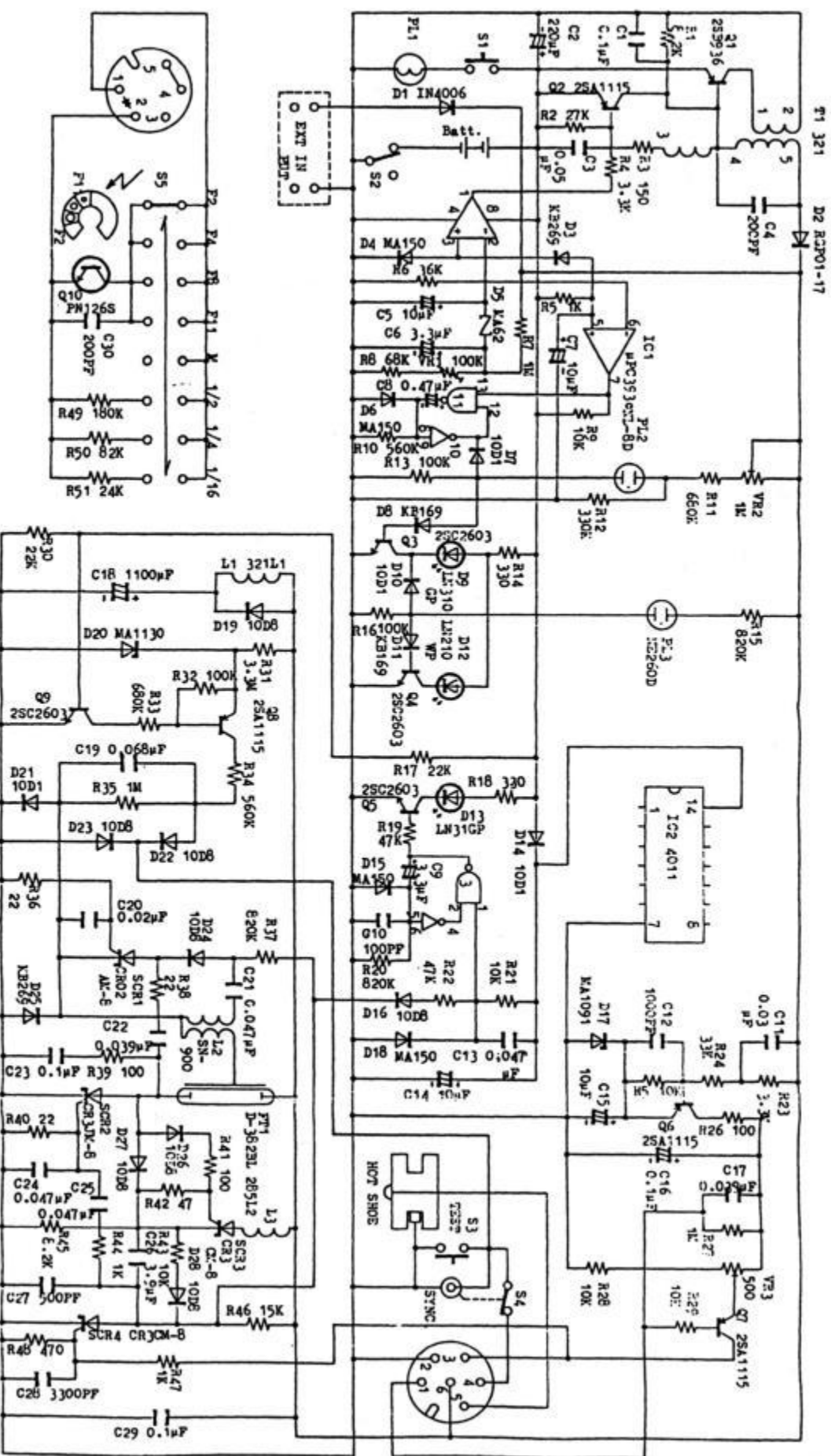
**Electronic Flash  
Model 285HV**

Please use this manual together with the service manual for Model Vivitar 285.

SCHEMATIC DIAGRAM - 1

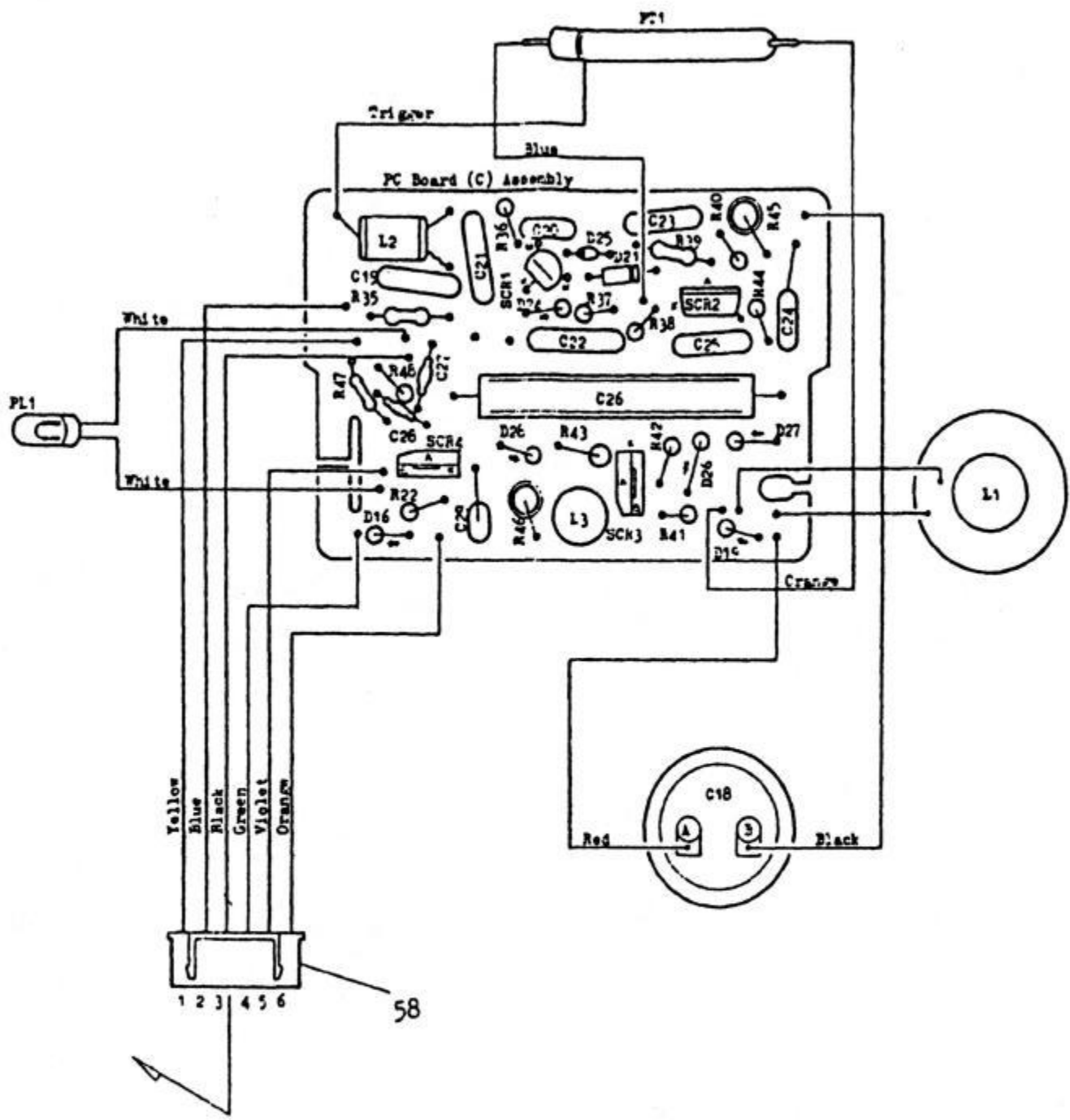


SCHEMATIC DIAGRAM - 2

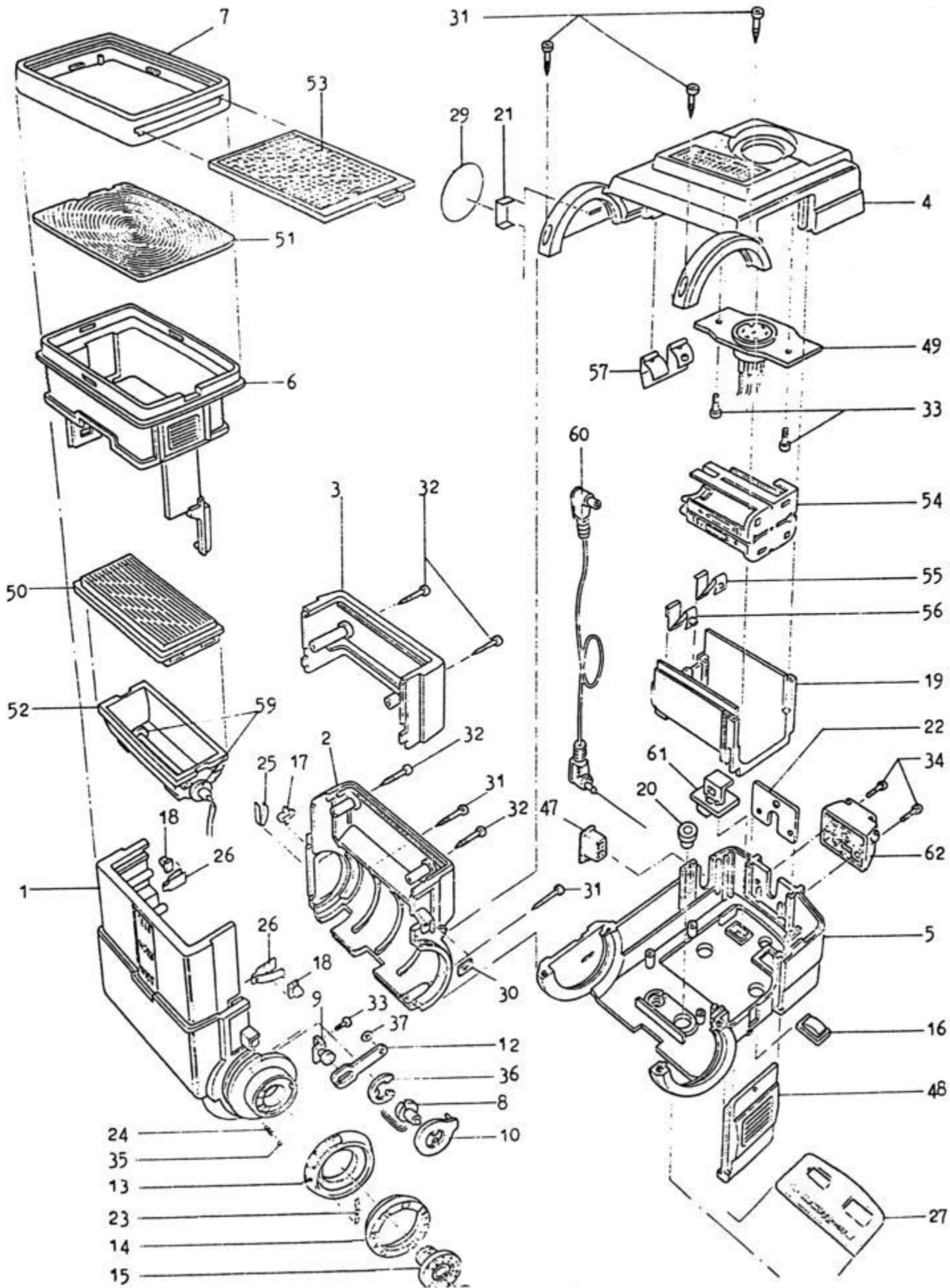




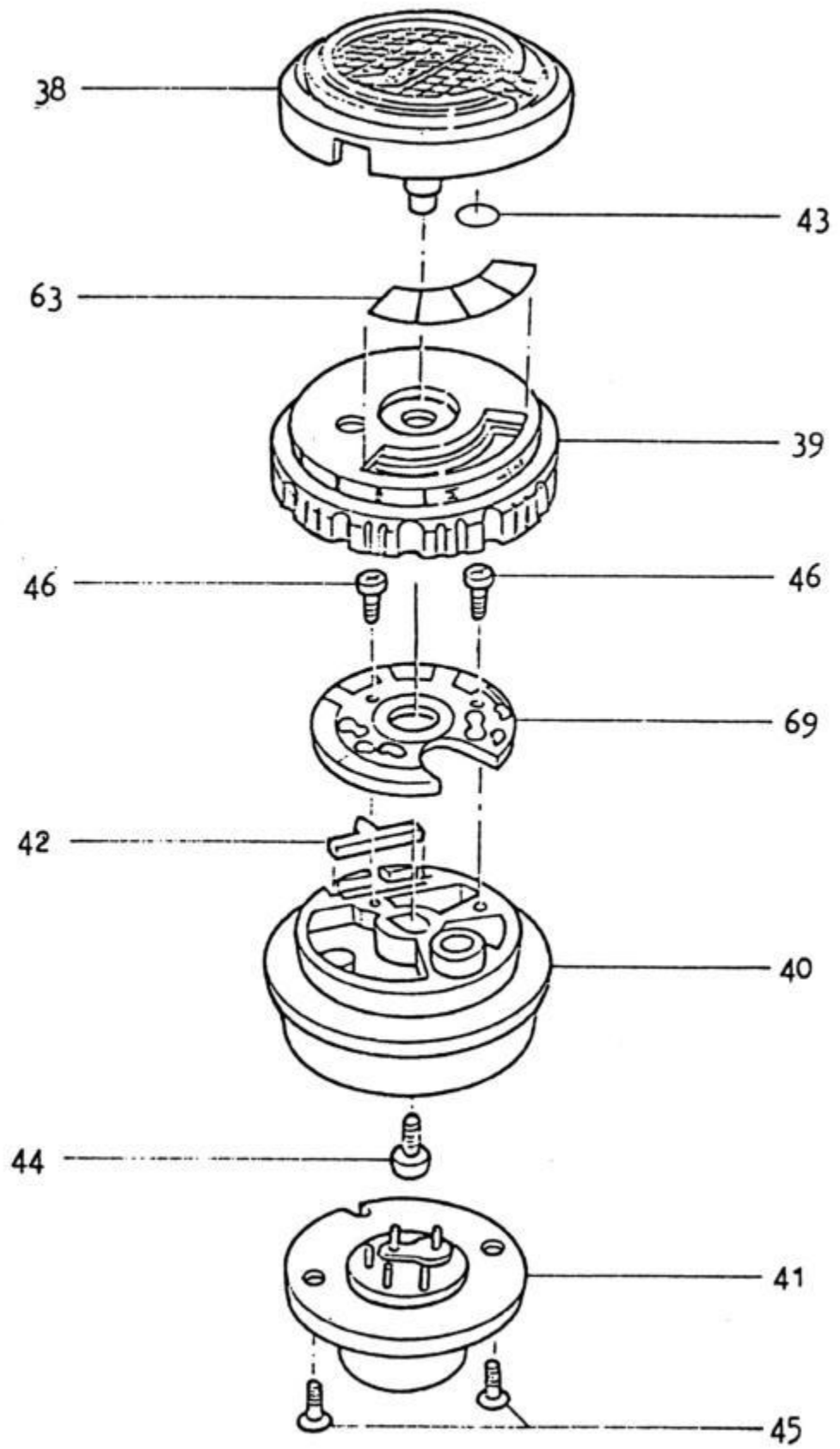
PC BOARD AND WIRING CONNECTIONS - 2



EXPLODED VIEW



EXPLODED VIEW OF SENSOR ASSEMBLY





## PARTS LIST

## Vivitar Automatic Electronic Flash Unit Model 285HV

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Remarks</u>
<u>MECHANICAL PARTS</u>				
1	SS091-28	BODY CASE A ASSEMBLY	1	
2	SS091-17	CASE B, BODY	1	
3	SS091-18	CASE C, BODY	1	
4	SS093-66	BODY CASE D ASSEMBLY	1	o
5	SS093-65	CASE E, BODY	1	o
6	SS038-21	HOOD CASE ASSEMBLY	1	
7	SS038-17	MASK, HOOD CASE	1	
8	SS020-46	HOLDER, LAMP	1	
9	SS035-26	AXIS, DIAL ARM	1	
10	SS007-68	PLATE, DIAL TURNING	1	
11	SS035-28	HOLDER, LED	1	
12	SS035-27	ARM, DIAL	1	
13	SS105-24	DIAL, FILM SPEED	1	
14	SS105-25	DIAL, F-STOP	1	
15	SS105-26	DIAL, DISTANCE	1	
16	SS006-36	COVER, LED	1	
17	SS178-12	STOPPER, CLICK	1	
18	SS178-17	STOPPER, CLICK	2	
19	SS027-07	CASE, BATTERY	1	
20	SS006-25	BUTTON, GL	1	
21	SS112-44	FIXTURE, BODY CASE	1	
22	SS112-38	WASHER, SHOE	1	
23	SS178-05	SPRING, CLICK STOPPER	1	
24	SS164-17	SPRING	1	
25	SS178-09	SPRING, CLICK STOPPER	1	
26	SS178-20	SPRING, CLICK STOPPER	2	
27	SS222-48	PLATE, REAR	1	o
28	SS106-99	PLATE, COVER	1	
29	SS106-68	PLATE, COVER	1	
30	SS206-05	PLATE, DIAL INDICATION	1	
31	SG022-28	SCREW, PANHD, TAP, 2x10, BR	5	
32	SG032-01	SCREW, PANHD, TAP, 2x22, BR	4	
33	SG023-22	SCREW, PANHD, TAP, 2x5, NI	6	
34	SG000-20	SCREW, PANHD, 2x10, BR	2	
35	SG070-03	BALL, STEEL, 2.0	1	
36	SG041-10	E-RING	1	
37	SG041-11	CS-RING	1	



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Remarks</u>
38	SS020-49	SENSOR CASE A ASSEMBLY	1	
39	SS020-50	SENSOR CASE B ASSEMBLY	1	
40	SS020-43	CASE C, SENSOR	1	
41	SS020-44	CASE D, SENSOR	1	
42	SS178-06	STOPPER, CLICK	1	
43	SS022-11	COVER, FILTER	1	
44	SG022-24	SCREW, PANHD, TAP, 2x6, NI	1	
45	SG026-02	SCREW, OVALHD, TAP, 2x6, BR	2	
46	SG022-48	SCREW, PANHD, TAP, 1.7x4, BR	2	
47	SS017-24	CAP, SOCKET	1	
<u>FUNCTION PARTS</u>				
48	SS037-12	LID, BATTERY COMPARTMENT	1	
49	SS012-28	CONNECTOR BASE ASSEMBLY	1	
50	SS005-84	DIFFUSER, NORMAL	1	
51	SS005-85	LENS, FRESNEL	1	
52	SS003-51	REFLECTOR	1	
53	SS005-96	WIDE DIFFUSER ASSEMBLY	1	
54	SS001-58	BATTERY CARTRIDGE ASSEMBLY	1	
55	SS209-09	TERMINAL (+), BATTERY	1	
56	SS209-10	TERMINAL (-), BATTERY	1	
57	SS109-24	TERMINAL (C), BATTERY	1	
58	SS703-50	WIRE CONNECTOR ASSEMBLY	1	
59	SS011-33	BUSHING, XENON TUBE	2	
60	SS700-13	SYNCHRO-CORD	1	
61	SS008-67	KNOB, SWITCH	1	
62	SS128-34	SHOE ASSEMBLY	1	
63	SS025-35	FILTER, MESH	1	
64	SS211-08	CONNECTOR	1	
<u>RESISTOR</u>				
R1	SC039-76	CARBON, 8.2k $\Omega$ 1/4W	1	
R2	SC039-97	CARBON, 27k $\Omega$ 1/4W	1	
R3	SC039-20	CARBON, 150 $\Omega$ 1/4W	1	
R4	SC007-55	CARBON, 3.3k $\Omega$ 1/4W	1	
R5	SC049-56	CARBON, 1k $\Omega$ 1/6W	1	
R6	SC059-35	CARBON, 36k $\Omega$ 1/6W	1	o
R7	SC007-70	CARBON, 1M $\Omega$ 1/4W	1	
R8	SC009-32	CARBON, 68k $\Omega$ 1/4W	1	
R9.21.25 28.29	SC039-32	CARBON, 10k $\Omega$ 1/8W	5	
R10	SC049-95	CARBON, 560k $\Omega$ 1/8W	1	
R11.33	SC007-50	SOLID, 680k $\Omega$ 1/4W	2	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Remarks</u>
R14.18	SC007-58	CARBON, 330 $\Omega$ 1/4W	2	
R15.37	SC009-33	CARBON, 820k $\Omega$ 1/4W	2	
R16	SC009-27	CARBON, 100k $\Omega$ 1/8W	1	
R17.30	SC007-96	CARBON, 22k $\Omega$ 1/4W	2	
R19	SC007-36	SOLID, 47k $\Omega$ 1/4W	1	
R20	SC007-40	SOLID, 820k $\Omega$ 1/4W	1	
R22	SC009-47	CARBON, 47k $\Omega$ 1/4W	1	
R23.31	SC007-18	SOLID, 3.3M $\Omega$ 1/4W	2	
R24	SC009-96	SOLID, 33k $\Omega$ 1/4W	1	
R26	SC039-17	CARBON, 100 $\Omega$ 1/8W	1	
R27	SC016-59	SOLID, 1M $\Omega$ 1/8W	1	
R34	SC039-51	CARBON, 560k $\Omega$ 1/4W	1	
R35	SC007-20	SOLID, 1M $\Omega$ 1/4W	1	
R36.38.40	SC007-93	CARBON, 22 $\Omega$ 1/4W	3	
R39.41	SC007-54	CARBON, 100 $\Omega$ 1/4W	2	
R42	SC049-41	CARBON, 47 $\Omega$ 1/4W	1	
R43	SC008-62	METAL OXIDE 10k $\Omega$ 1W	1	
R44.47	SC007-57	CARBON, 1k $\Omega$ 1/4W	2	
R45	SC019-01	METAL OXIDE 8.2k $\Omega$ 2W	1	
R46	SC008-88	METAL OXIDE 15k $\Omega$ 2W	1	
R48	SC039-44	CARBON, 470 $\Omega$ 1/4W	1	
R49	SC039-35	CARBON, 180k $\Omega$ 1/8W	1	
R50	SC039-93	CARBON, 82k $\Omega$ 1/8W	1	
R51	SC049-35	CARBON, 24k $\Omega$ 1/8W 1%	1	
VR1	SC015-83	VARIABLE 100k $\Omega$ K0AA00B15	1	
VR2	SC015-14	VARIABLE 1M $\Omega$ K4AA00B16	1	
VR3	SC015-38	VARIABLE 500 $\Omega$ K4AA00B52	1	
		<u>CAPACITOR</u>		
C1	SC001-95	TF, 0.1 $\mu$ F J05-2D	1	
C2	SC100-07	ELECTROLYTIC, 220 $\mu$ F 10V	1	
C3	SC004-01	SEMICONDUCTIVE, 0.05 $\mu$ F 12V	1	
C4.30	SC002-02	CERAMIC, 200PF 500V	2	
C5.7.14.15	SC000-69	ELECTROLYTIC, 10 $\mu$ F 16V	4	
C6.9	SC000-67	ELECTROLYTIC, 3.3 $\mu$ F 50V	2	
C8	SC000-78	ELECTROLYTIC, 0.47 $\mu$ F 50V	1	
C10	SC002-01	CERAMIC, 100PF 500V	1	
C11	SC001-02	MYLAR, 0.03 $\mu$ F 400V	1	
C12	SC002-33	CERAMIC, 1000PF 500V	1	
C13.24	SC101-11	TF, 0.047 $\mu$ F J05-2D	2	
C16	SC000-68	ELECTROLYTIC, 0.1 $\mu$ F 50V	1	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Remarks</u>
C19	SC101-69	MD, 0.068 $\mu$ F M35-2D	1	
C20	SC001-23	MYLAR, 0.02 $\mu$ F 50V	1	
C21.25	SC101-57	MD, 0.047 $\mu$ F M35-2D	2	
C22	SC101-54	MD, 0.039 $\mu$ F M35-2D	1	
C23.29	SC101-95	MD, 0.1 $\mu$ F M40-1T	2	
C26	SC101-75	MD, 3.9 $\mu$ F K50-1T	1	
C27	SC002-03	CERAMIC, 500PF 500V	1	
C28	SC002-08	CERAMIC, 3300PF 50V	1	
<u>DIODE</u>				
D1	SC005-75	DIODE, IN4006	1	o
D2	SC005-56	DIODE, RGPO1-17	1	o
D3.25	SC027-03	VARISTOR, KB269	2	
D4.6.15.18	SC005-48	DIODE, MA150	4	
D5	SC006-52	DIAC, MA62	1	
D7.10.14.21	SC005-04	DIODE, 10D1	4	
D8.11	SC027-02	VARISTOR, KB169	2	
D9.12	SC025-26	LED ASSEMBLY	1	
D13	SC025-17	LED, LN31GP	1	
D16.19.22.23 24.26.27.28	SC005-05	DIODE, 10D8	8	
D17	SC006-08	ZENER, MA1091	1	o
D20	SC006-13	ZENER, MA1130	1	
<u>TRANSISTOR, SCR &amp; IC</u>				
Q1	SC003-69	TRANSISTOR, 2SB936	1	
Q2.6.7.8	SC003-49	TRANSISTOR, 2SA1115	4	
Q3.4.5.9	SC003-56	TRANSISTOR, 2SC2603	4	
Q10	SS512-14	PHOTO-TRANSISTOR, PN-126S	1	
SCR1	SC023-04	SCR, CRO2AM-8	1	
SCR2	SC023-31	SCR, CR3JM-8	1	
SCR3.4	SC023-32	SCR, CR3CM-8	2	
IC1	SS514-65	IC, $\mu$ PC393C	1	o
IC2	SS514-12	IC, 4011	1	
<u>TRANSFORMER, INDUCTOR &amp; COIL</u>				
T1	SS506-62	TRANSFOR, OSC 321	1	
L1	SC021-13	INDUCTOR, 321L1	1	
L2	SS508-32	COIL, TRIGGER SN-900	1	
L3	SC021-16	INDUCTOR, 285L2	1	
<u>TUBE &amp; SWITCH</u>				
FT1	SS500-86	TUBE, XENON D-382BL	1	
PL1	SS502-29	LAMP, 5V 115mA	1	
PL2	SS502-14	TUBE, NEON NL-8D	1	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Remarks</u>
<u>PC BOARD ASSEMBLY</u>				
65	SS303-89	PC BOARD A ASSEMBLY	1	o
66	SS303-35	PC BOARD B ASSEMBLY	1	
67	SS301-84	PC BOARD C ASSEMBLY	1	
68	SS303-90	PC BOARD D ASSEMBLY	1	o
69	SS301-86	SENSOR PC BOARD ASSEMBLY	1	

NOTES: 1) "o" in "Remarks" column indicates new parts.

2) The printed circuit board assemblies of Ref. No. 65, 66, 67, 68 and 69 will be supplied till the day, three months before discontinuation date of production of the Model Vivitar 285HV.



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