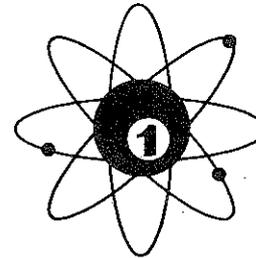


PS 148 PARTS LIST  
(Refer to Schematic)

REFERENCE NO.	RESISTORS	STOCK No.	PRICE
Probe	24 meg, 2W, 5%, 10KV	14G223	\$4.50
R77	2.4K 18W, 5%	14G211	.75
SWITCHES			
S1	2P4P Rotary	25G69	2.50
S2, S4	2P3P Slide	25G64	.75
S3	3P7P Rotary	25G68	2.75
S5	4P3P Slide	25G108	1.95
S6	1P2P Slide	25G4	.50
CAPACITORS			
C23	.9 uf, 5%, 50V	24G108	1.25
C36, C37	.1 mf, 20%, 1500 volts	24G101	1.40
C40	150, 50, 10 @ 150, 200, 150 volts	24G103	2.95
C41	20, 50, 40 @ 425, 400, 175 volts	24G102	2.95
COILS			
L1	28Micro H on 10K	46G2	1.25
L2, L3	44Micro H	46G3	.75
L6, L7	70Micro H on 18K	46A31-1	.90
CONTROLS			
R9	Control, Vertical Input, 10K, 10%	15G33	1.25
R29	Potentiometer, Vert. Cal 5K, 30%	15G10	1.75
R35, R65	Control, V & H Centering, 240K C.T.	15G34	3.25
R41	Control, Sync/Phase 20K-200K, 30%	15G32	4.95
R44	Control, Horiz. Freq, 850K 5%	15G43	2.50
R51	Control, Horiz. Gain, 10K, log	15G37	1.95
R70	Control, Focus, 1 meg, 30%	15G36	1.95
R71	Control, Intensity, 200K, 30%	15G35	1.95
R94	Control, Vert. Amp Bal, 500K P. C. Mount	15A57	1.75
MISC.			
F1	Circuit Breaker, 1.5 AMP, 1/4" button	44G3	2.00
I1	On-Off Indicator, NE-2E	20G6	.50
T1	Power Transformer	28S24A	24.95
	Line Cord, 3 conductor	27G10	1.50
	Knob, with Pointer	21S3	.20
	Knob, small	21S5	.20
	Knob, large	21G13	.75
	Graph Screen	33B238	1.25
	Test cable assembly (complete)	39G11	9.95
	Thumb Nut, Bezel Mtg	31G11	.25
	Demodulator Probe	39G3	5.75
	Rubber Feet	33G74	.15
	Panel, Painted & Screened	SC10C109-2	6.95
	Viewing Hood	33A239	.95

(PRICES SUBJECT TO CHANGE WITHOUT NOTICE)



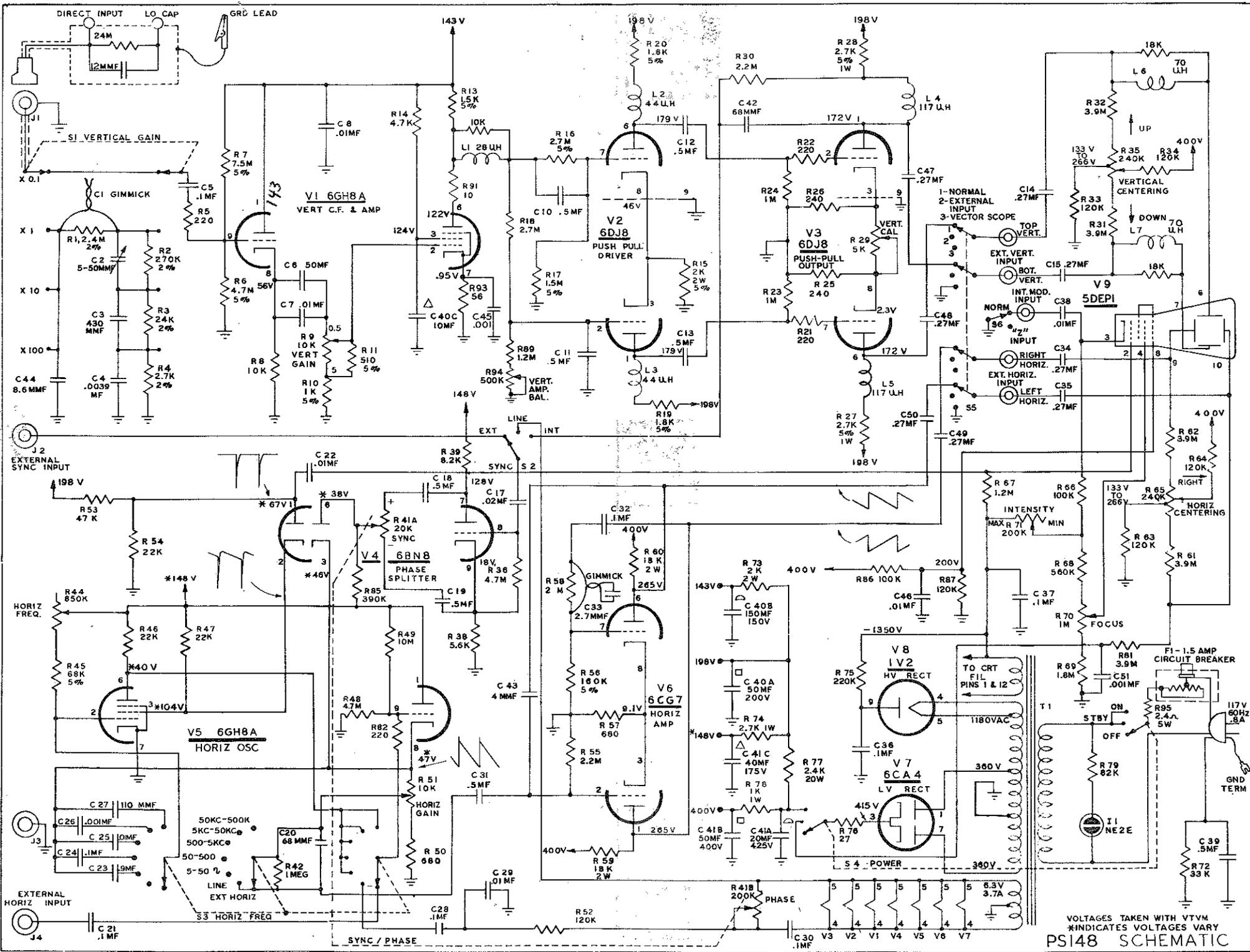
# SENCORE

## SCHEMATIC AND PARTS LIST

for

PS 148

426 Westgate Drive  
Addison, Illinois 60101



VOLTAGES TAKEN WITH VTVM  
 \*INDICATES VOLTAGES VARY  
**PS148 SCHEMATIC**

CONVERSION INSTRUCTIONS FOR USING THE 28B40 TRANSFORMER  
IN PLACE OF THE 28S24 IN THE SENCORE SCOPE. *USED 28C 40 XFMR*

The new 28B40 power transformer makes use of solid state rectifiers to reduce the power from the line and provide better reliability of your scope.

There may be slight variations in power supplies in different scopes. The new transformer and parts included will up date your scope to the latest design.

1. Remove the 1V2(V8) and 6CA4(7) tubes and discard.
2. Remove existing power transformer and note where each lead is wired.
3. Mount the new 28B40 transformer and rewire exactly as the previous transformer except blue lead which replaces the old brown and blue leads going to pins 4 and 5 of the 1V2 socket.
4. Insert one lead from the 24G211 (.2ufd. @1700DC) into the opening of the 1V2 socket from the top of the chassis as shown in figure 1. Connect this lead to pin 3 of the socket as shown in figure 2.
5. Connect the other lead from the .2ufd capacitor to an unused terminal on the strip next to the 1V2 socket.
6. Connect the blue wire from the power transformer to the unused terminal that the .2ufd was connected and solder both points.
7. Connect the anode end of a 16S12 to pin 3 of the 1V2 socket. Solder the cathode end of this diode to the scope chassis.
8. Connect the cathode end of the second 16S12 to pin 3 and solder all connections. Connect the anode end to pin 1 on the same socket.
9. Connect the foil end of the 24G101 (.1ufd@1500VDC) to the same ground point as the other high voltage filter condensers and the other end to pin 1 on the 1V2 socket. Solder all connections.
10. Connect two 16G11 diodes in series by twisting the anode lead of one to the cathode lead of another. Do the same with the other two 16G11 diodes. Solder the connections.
11. Connect the anode of one pair of diodes to pin 1 on the 6CA4(V7) socket where the red transformer lead is connected. Connect the cathode lead to pin 3.
12. Connect the anode of the other pair of diodes to pin 7 of the 6CA4 socket and the cathode end to pin 3. Solder all connections.

This completes the power supply conversion. Be sure to check from B+ to ground with an ohmmeter for any shorts. Check all solder connections and recheck wiring against the schematic for any possible errors. If your scope has an astigmatism control, it may have to be reset for a sharp trace due to the change in high voltage. You will also have to check the peak to peak voltage calibration according to your instruction manual.

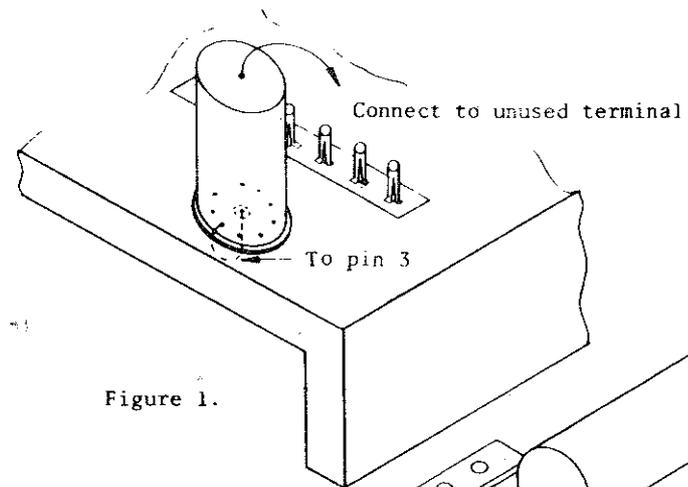


Figure 1.

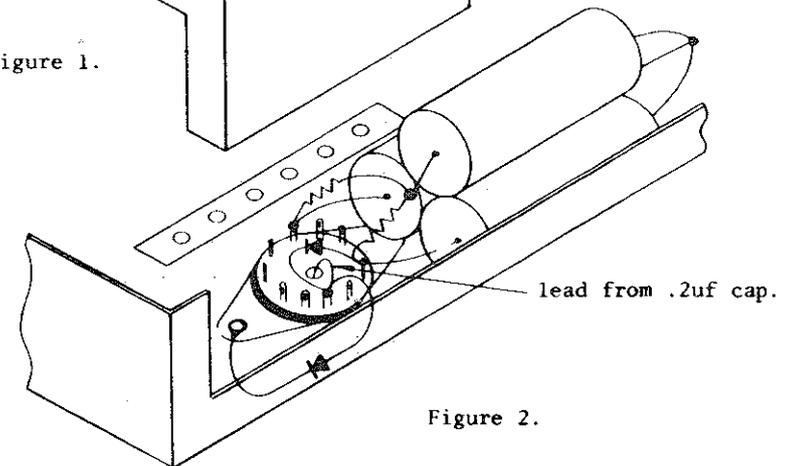


Figure 2.

Red Transformer Lead

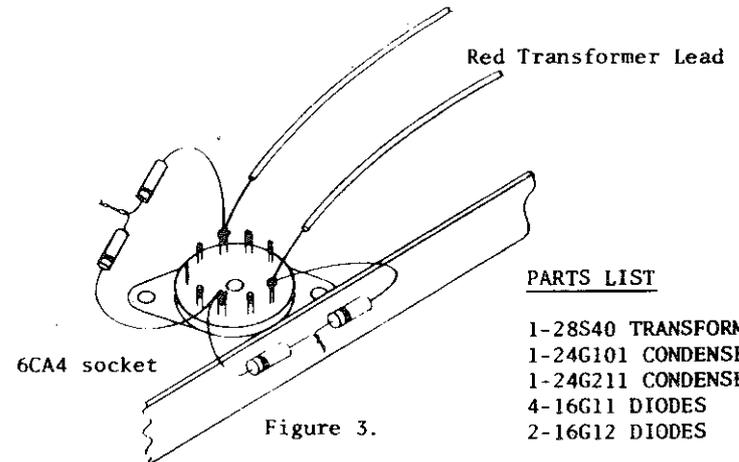


Figure 3.

PARTS LIST

- 1-28S40 TRANSFORMER
- 1-24G101 CONDENSER
- 1-24G211 CONDENSER
- 4-16G11 DIODES
- 2-16G12 DIODES