

# VIDEO DRIVER ±15V POWER SUPPLY

Q-9 40409  
Q-10 40410  
IC-11 SG4501

C-30 .01 CER.  
C-31 .01 CER

C-32 6.8 $\mu$  35V TANT

C-33 6.8 $\mu$  35V TANT

R-62 DATE

R-63 DATE

R-64 75 $\Omega$

R-65 75 $\Omega$

CR-

C-34 6.8 $\mu$  35VDC TANT  
C-35 ? $\mu$  OVER 300V CER.

C-29 .01 $\mu$  50V C

R-66 20K TRIM  
(GRID-1)

R-67 4.7K

C-36 .01 $\mu$  1KV DISC

C-37 " " "

C-38 " " "

C-39 " " "

## CONNECTIONS

CRT	0	0	0	0	0
	FILE (HOT)	FILE (GND)	GRID 1	GRID 2	CATHODE

VIDEO IN

0 GND

0 VIDEO IN

DCU	0	0	0	0	0	0	0
	GND	BLANK					

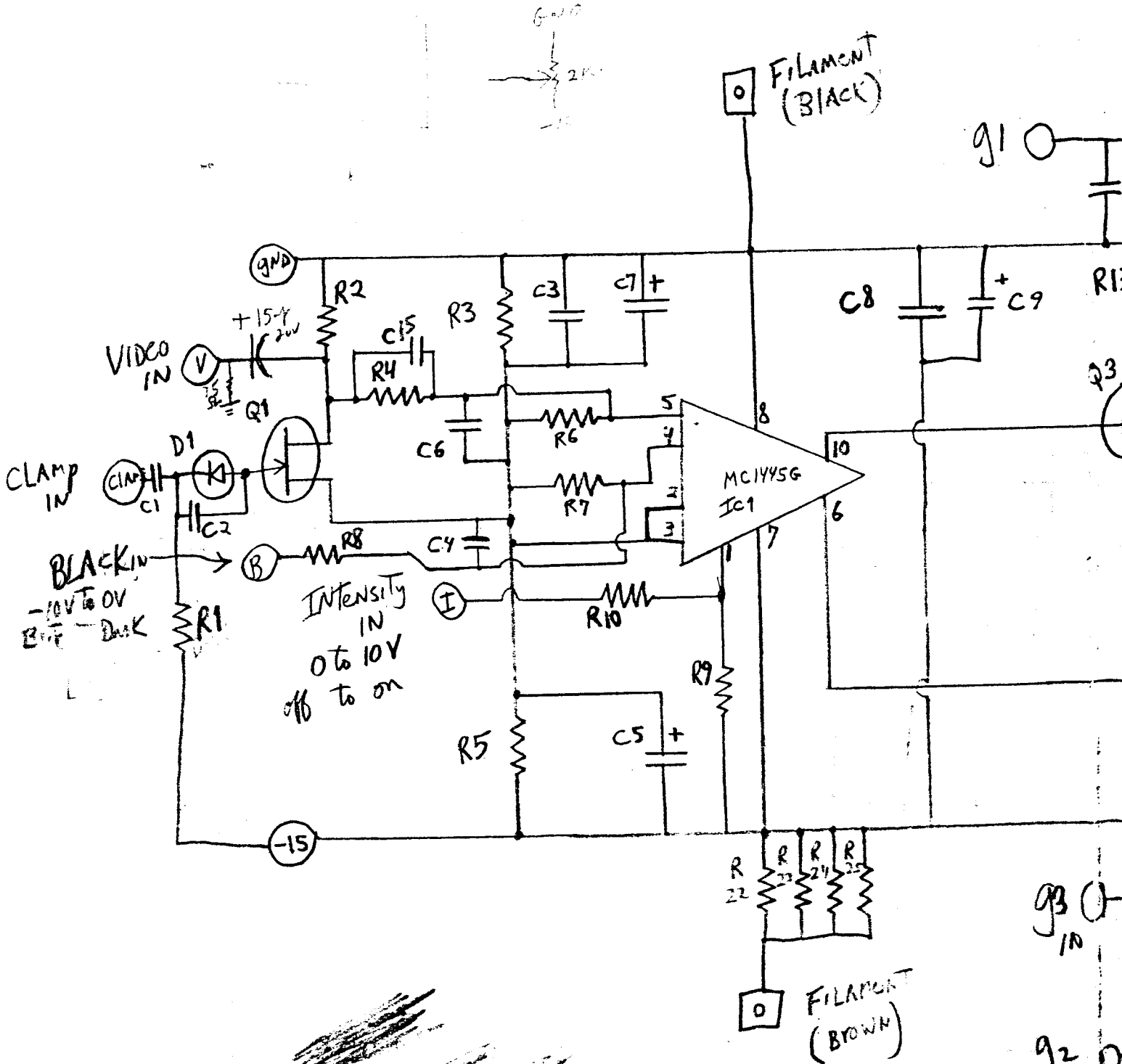
EDGE

BLANK

POWER SUPPLY	0	0	0	0	0	0
	+28	-28	0	0	0	+300
	+45			6.3V		

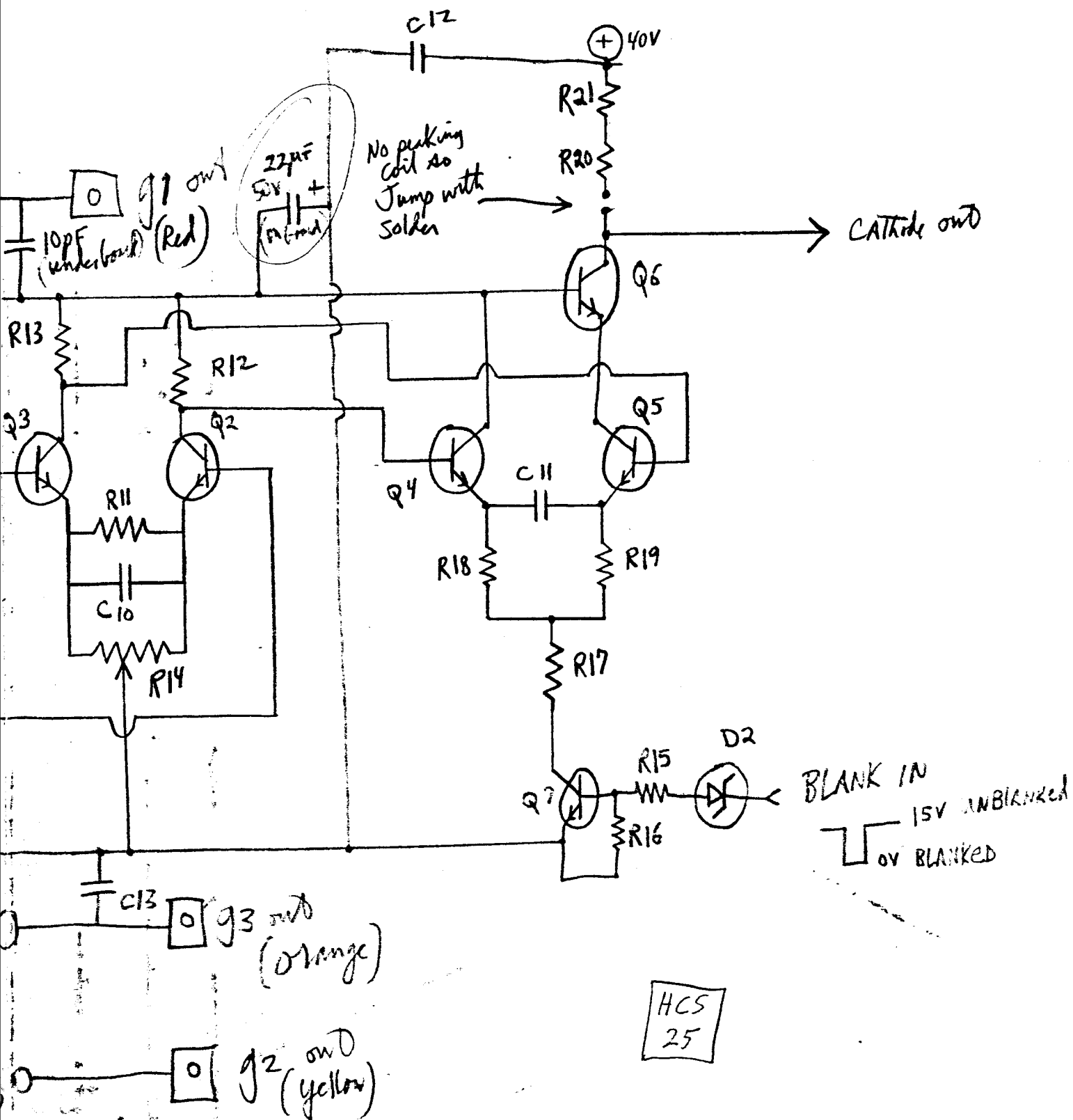
OVER BRIGHTNESS BLANKING

VIDEO



# CRT DRIVER

PC 119



## PC 119 Parts List - Video CRT Driver

### Transistors

Q1 - 2N4091  
Q2 - 2N5770, or MPS 6543, Hep56  
Q3 - or Hep 720  
Q4 - strap pairs together  
Q5 - for thermal contact  
Q6 - 2N2219A  
Q7 - MPS 5172

### Integrated Circuits

IC1 - MC 1445 G (or MC1545G is OK but  
expensive...) Use Heat SINK

# Parts List

PC 119

Video CRT Driver \*

- D<sub>1</sub> 1N914  
D<sub>2</sub> 1N5248 (18V Zener)  
→ Q<sub>1</sub> 2N4091  
Q<sub>2</sub> 2N5770  
→ Q<sub>3</sub> MPS 6543, Hep 56, Transistors  
Q<sub>4</sub> Strap these Hep 720 together  
Q<sub>5</sub> 2N2219A  
→ Q<sub>6</sub> MPS 5172 Transistor  
→ Q<sub>7</sub> MPS 5172 Transistor  
- R<sub>1</sub> 47K — all 1/4 watt  
- R<sub>2</sub> 75Ω 5%  
- R<sub>3</sub> 270Ω  
- R<sub>4</sub> ~~27K~~ 27K  
- R<sub>5</sub> 180Ω  
- R<sub>6</sub> 1K  
- R<sub>7</sub> 1K  
- R<sub>8</sub> 470K — use 2-1 Meg in parallel if you don't have 470K  
- R<sub>9</sub> 3-3K (3.6K is not as good)  
- R<sub>10</sub> 4.7K (use 6.8K if R<sub>9</sub>=3.6K)  
- R<sub>11</sub> ~~51Ω~~  
- R<sub>12</sub> 470Ω  
- R<sub>13</sub> 470Ω  
R<sub>14</sub> 2K pot  
- R<sub>15</sub> 1K  
- R<sub>16</sub> 1K  
→ R<sub>17</sub> ~~180Ω~~ 180Ω  
- R<sub>18</sub> 51Ω  
- R<sub>19</sub> 51Ω  
- R<sub>20</sub> 510Ω  
- R<sub>21</sub> 510Ω  
- R<sub>22</sub> } Use 3-120Ω (R<sub>22</sub>, R<sub>23</sub>, R<sub>24</sub>)  
23 } or 4-150Ω (R<sub>22</sub>, R<sub>23</sub>, R<sub>24</sub>, R<sub>25</sub>)  
24 } (to equal 40Ω)  
25 }

IC1

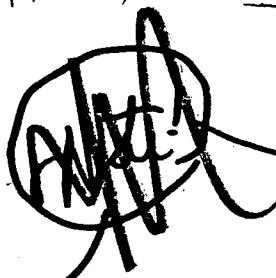
MC1445G

(1545G is OK also but expensive)

Heatsink

IC1

- C<sub>1</sub> .001  
- C<sub>2</sub> 10 pF  
- C<sub>3</sub> .1 ceramic  
- C<sub>4</sub> 33 pF  
- C<sub>5</sub> 15 μF/20V  
- C<sub>6</sub> 33 pF  
- C<sub>7</sub> 15 μF/20V  
- C<sub>8</sub> .1 ceramic  
- C<sub>9</sub> 15 μF/20V  
- C<sub>10</sub> ~~100 pF~~ 100 pF \*  
- C<sub>11</sub> ~ ~~100 pF~~ 100 pF \*  
- C<sub>12</sub> .1 μF ceramic  
- C<sub>13</sub> .1 μF ceramic  
- C<sub>14</sub> 15 μF/20V  
- C<sub>15</sub> gimmick \* 1 pF



\* These parts are fine for

NON-30 MHz use

for broadcast use, C<sub>10</sub>, C<sub>11</sub>

and C<sub>15</sub> are critical and need adjustment for each board

HCS  
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