POWER SUPPLY BOARD 600 V.

LDK 4812/00

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A. TECHNICAL DATA

Input signal	: H-pulse, negative, amplitude $\geq$ 1.5 Vpp
Output voltage	: 1 x 580 V $\pm$ 10 V
	3 x 470 V - 570 V adjustable
Noise and ripple	: $\leq$ 200 mV
Supply voltage	: +300 V
	-12.9 V

B. CIRCUIT DESCRIPTION

The 600 V supply unit delivers a voltage of 600 V to the plumbicon mesh. Three voltages, which are variable between approx. 490 and 590 V, are generated for the final anodes of the plumbicons. These voltages serve for static focusing.
A negative H pulse is amplified by TS1. The pulse on the collector bottoms TS2-4. This means that TS2-4 serve as a switch. The collector voltage on TS2 will consequently vary between +300 V and earth potential. Due to this a pulse will arise with an amplitude of approx. 300 V.
After C12, the lowest level of the pulse is clamped at +300 V by GR10. After rectification by GR9 a direct voltage of approx. 600 V is then obtained on C14. The same procedure is repeated 3 times. However, the bottom of the pulse is then clamped at a variable voltage, so that the direct voltage supplied is adjustable.
The voltage values on the outputs indicated in the circuit diagram, are slightly higher in reality. This is due to the load exerted on the high ohmic circuit (22 M) by the measuring instrument used (20.000 Ω/V).
Diodes GR1-2 limit the V_{be} of TS2 and TS3.

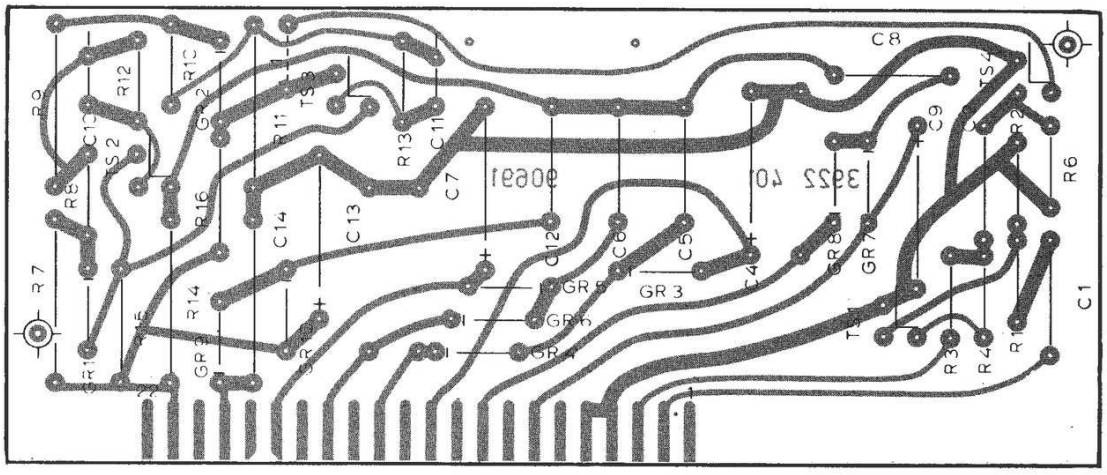
C. SERVICE PARTS

1. Mechanical

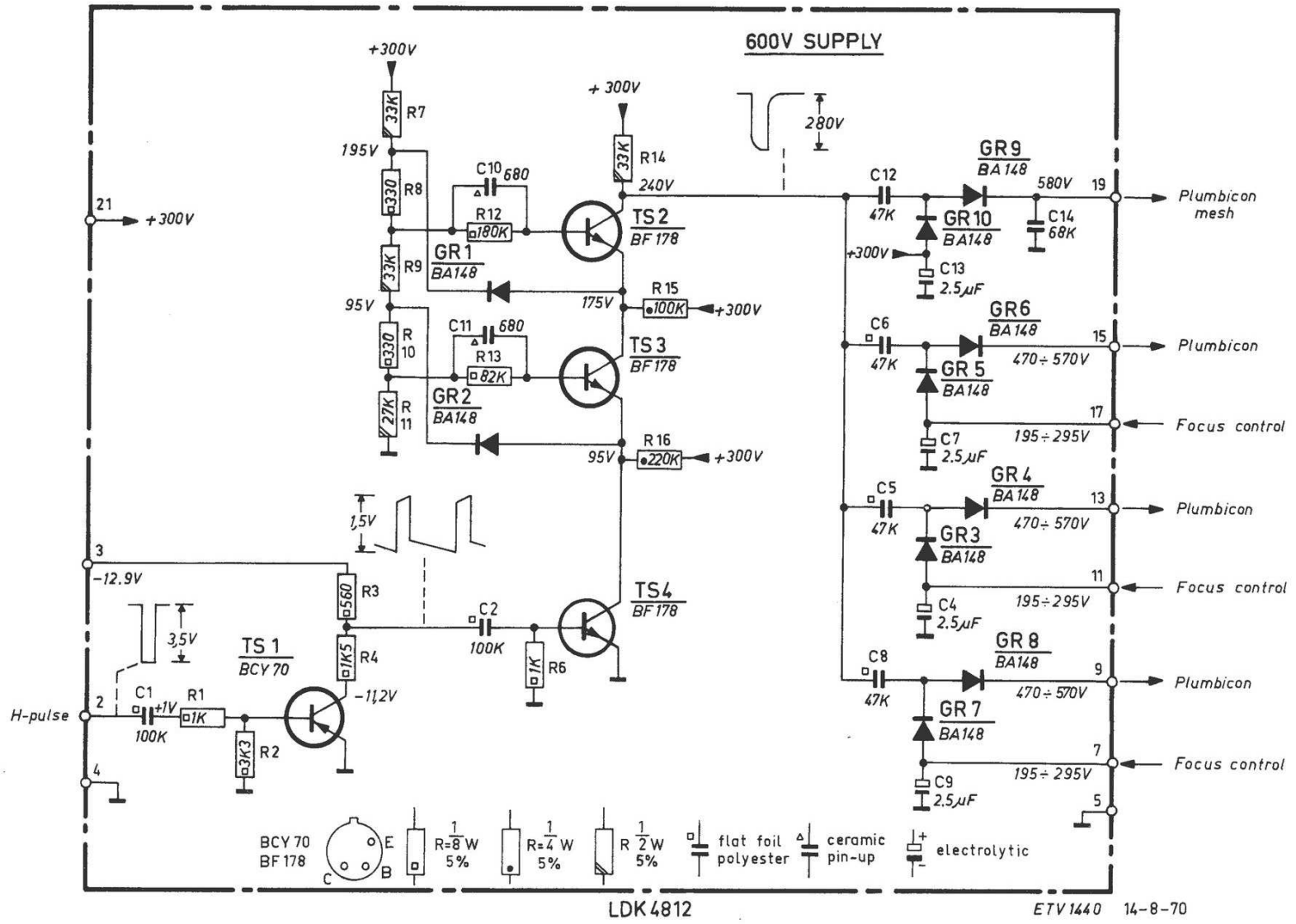
	Spacer for transistor	4822 255 50006

2. Electrical

Item Pos.	Description	Code number
TS1	BCY70 Silicon transistor PNP	4822 130 40324
TS2-3-4	BF178 Silicon transistor NPN	4822 130 40299
GR1÷10	BA148 Silicon diode	4822 130 30256
C1-2	0.1 µF 100 V Polyester	4822 121 40036
C4-7-9-13	2.5 µF 350 V Electrolytic	4822 124 20065
C5-6-8-12	47 K 400 V Polyester	4822 121 40151
C14	68 K 630 V Polyester	4822 121 40228



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