

NEW CAPACITORS

<http://www.nd2x.net/Russ-caps/cap-en.htm>

470 pF 15 kV 40 kVAR K15U-1a N1500 DIA: 63 THK: 20 LENGTH: 24
 470 pF 10 kV 25 kVAR K15U-1a N1500 DIA: 52 THK: 18 LENGTH: 22
 470 pF 4 kV 20 kVAR K15U-1a N1500 DIA: 45 THK: 7.5 LENGTH: 14

1500 pF 6 kV 25 kVAR K15U-2 N1500 DIA: 42.5 THK: 63 LENGTH: 66

REPLACE C27 47pF 6 kV (ONLY !!!!) BY ANY 2 x 100 pF 6kV OR BY
 A 47 pF 10 kV 50 kVAR K15U-1a P100 DIA: 75 THK: 9.5 LENGTH: 15

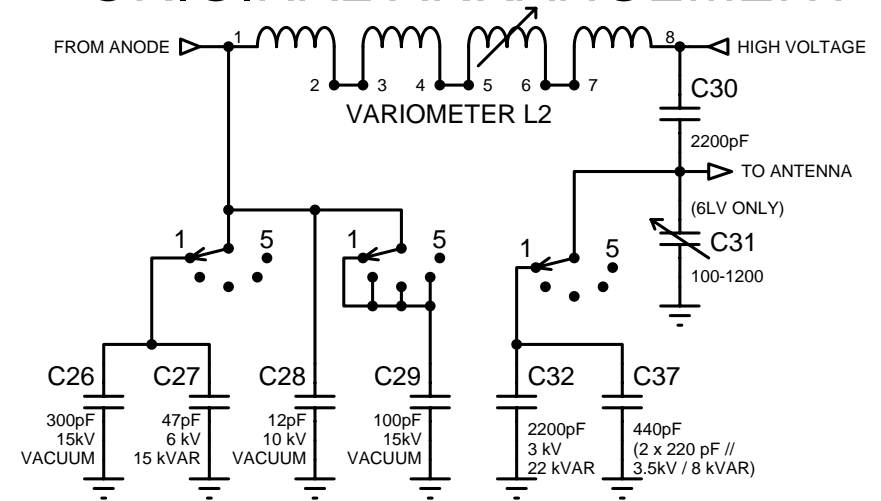
FOR MORE THAN 3000 WATTS OUTPUT
 ADD A FAN TO BLOW VARIOMETER
 AND BAND SWITCH CONTACTS

NEW ARRANGEMENT

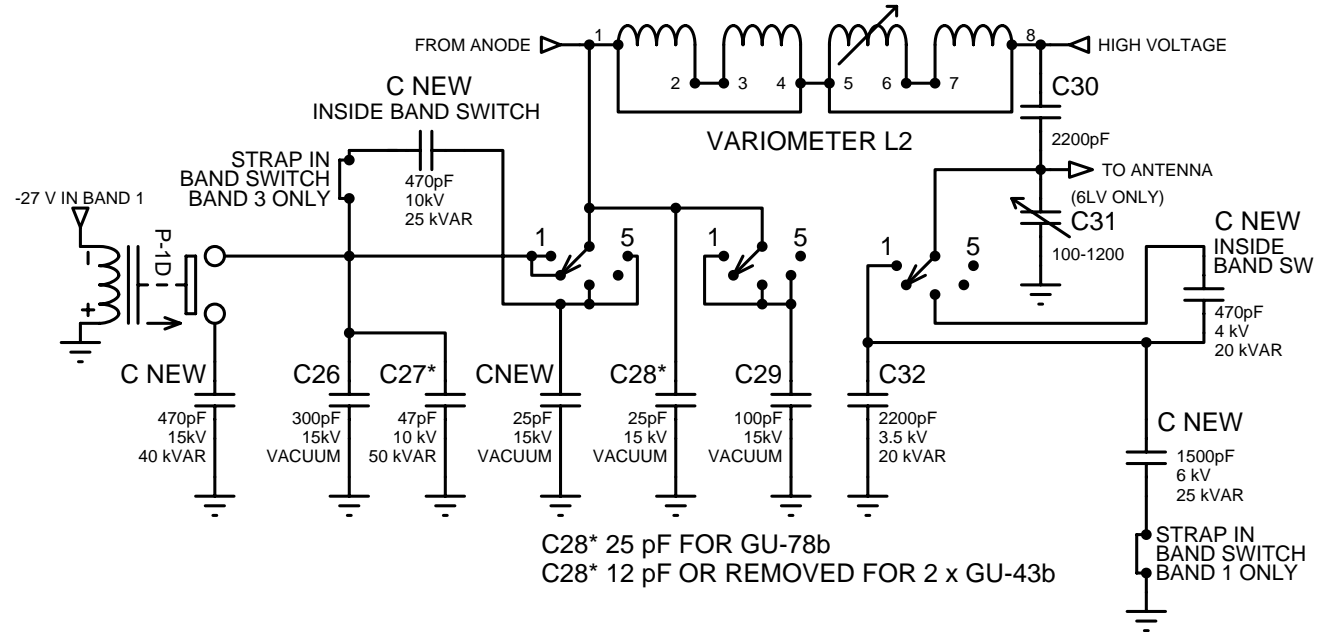
CALCULATIONS BASED ON
 3000 V @ 2 A (1000 OHMS)
 OUTPUT POWER ~4000 WATTS

	HARMONICS	
	2 (>dB)	3 (>dB)
BAND 1: 1.5 TO 3 MHz		
1.8 MHz Q = 11	-34.5	-46.5
BAND 2: 3 TO 5 MHz		
3.5 MHz Q = 9.5	-31.5	-43.5
3.8 MHz Q = 10.3		
4 MHz Q = 10.8		
5 MHz Q = 13.5	-34	-46
BAND 3: 5 TO 10 MHz		
5 MHz Q = 8.9	-30.5	-42.5
7 MHz Q = 12.5	-33.5	-45.5
7.1 MHz Q = 12.6		
7.3 MHz Q = 13	-34	-46
BAND 4: 10 TO 16 MHz		
10 MHz Q = 10	-31	-43
14 MHz Q = 14		
14.3 MHz Q = 14.3	-34.5	-47
18 MHz Q = 18	-37	-50
BAND 5: 16 TO 30 MHz		
18 MHz Q = 9.5	-30.5	-43.5
21 MHz Q = 11.1	-32.5	-45.5
24 MHz Q = 12.6	-34	-48
28 MHz Q = 14.7	-36	-50
30 MHz Q = 15.8	-36.5	-50.5

ORIGINAL ARRANGEMENT



NEW ARRANGEMENT



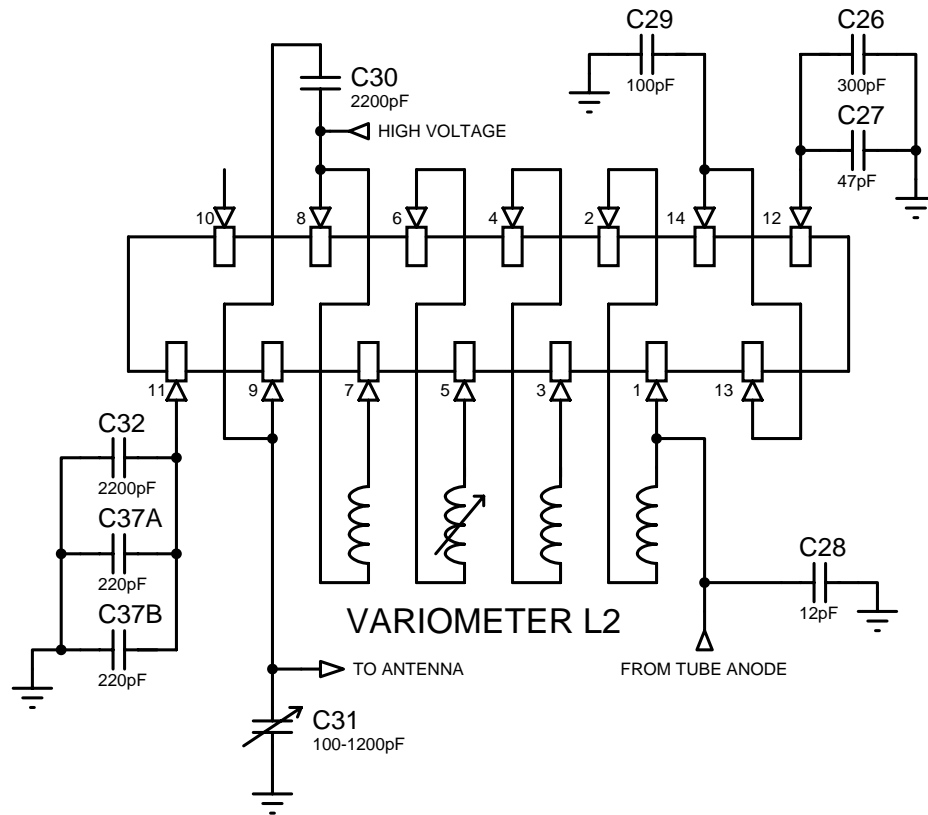
R-140 AMP GU-78b or 2 x GU-43b
 OUTPUT PI MODIFICATIONS

DATE: 16/10/06 REV: 2 PAGE: 1/5
 BY: f1frv@free.fr
 DOC N°: AMATEUR RADIO

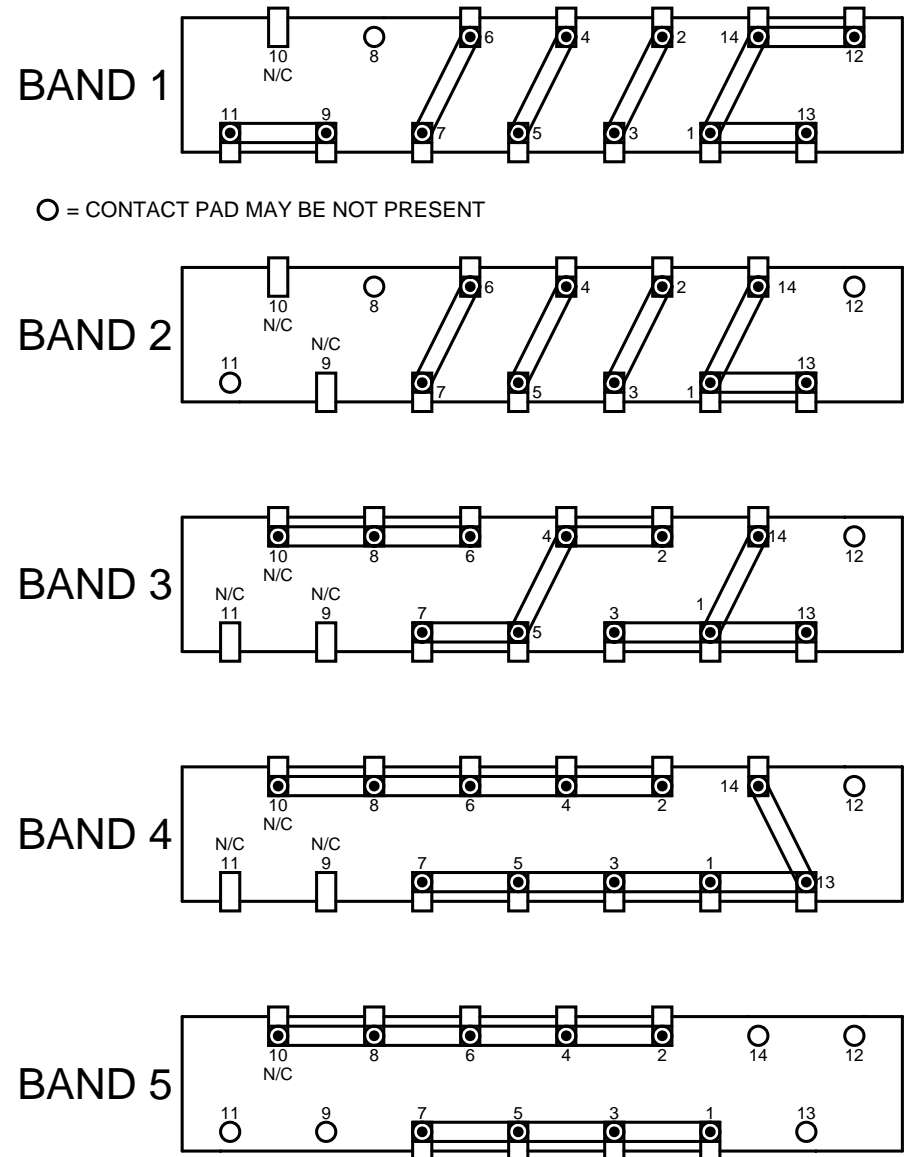
NO HV ON TUBE WHEN ROTARY SWITCH IS MOVING BETWEEN 2 POSITIONS !!!!

BE CAREFUL, TOP VIEW OF CONNETIONS OUT OF CIRCUIT, YOU CAN SEE FROM AMPLIFIER TOP, HAVE SYMETRICAL NUMBERING REGARDING THIS DRAWING. DO NOT CONFUSE !!!

TOP VIEW IN CIRCUIT



TOP VIEW IN CIRCUIT



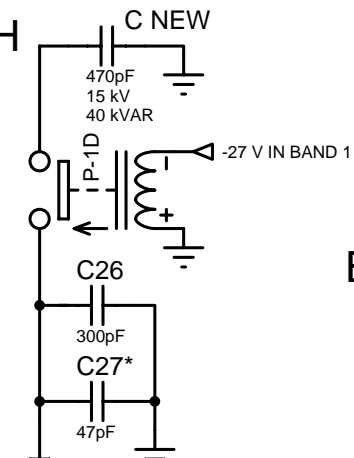
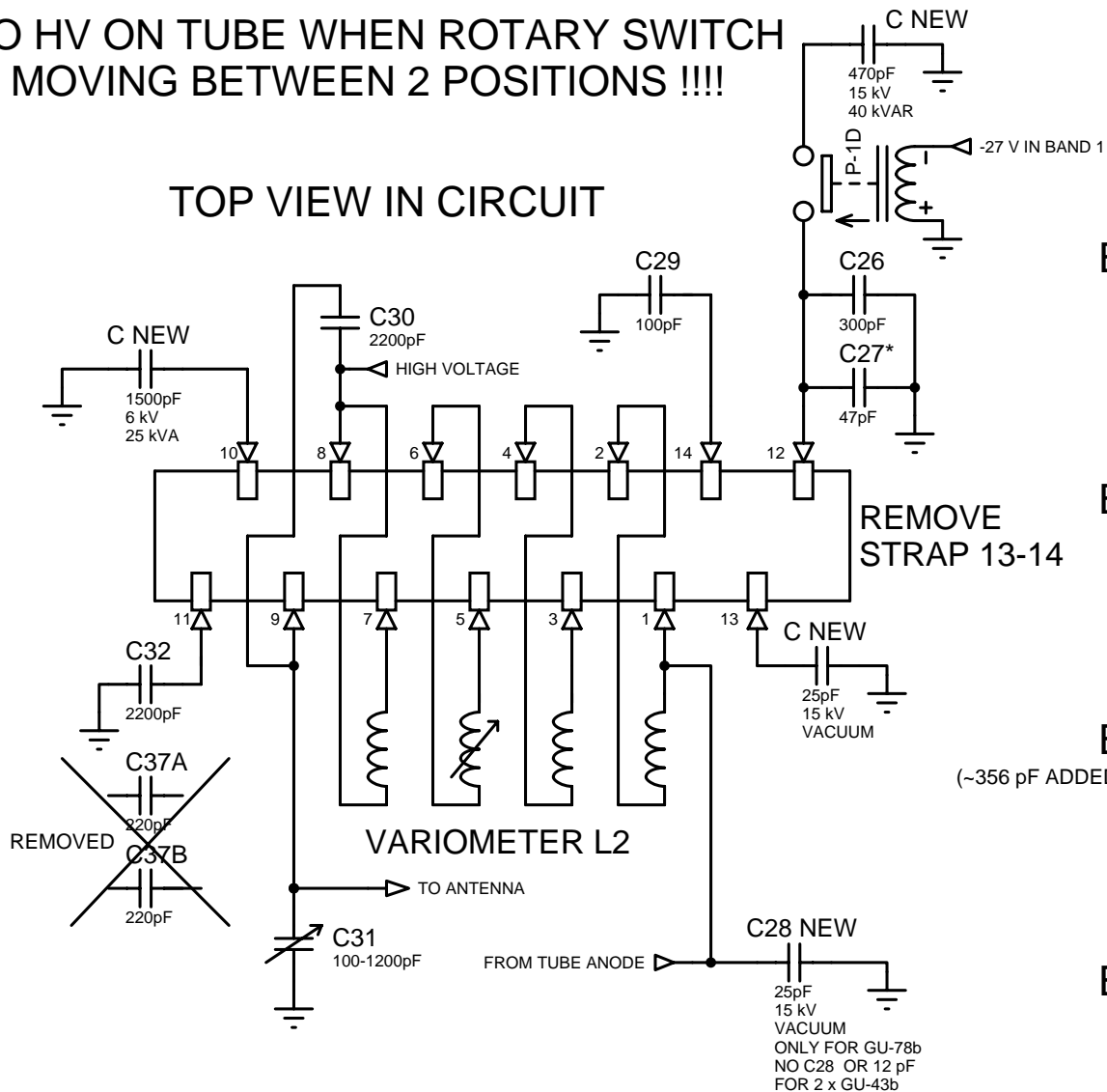
R-140 AMP GU-78b or 2 x GU-43b
ORIGINAL SWITCHING OLD "6LV"

DATE: 16/10/06 REV: 2 PAGE: 2/5
BY: f1frv@free.fr
DOC N°: AMATEUR RADIO

NO HV ON TUBE WHEN ROTARY SWITCH IS MOVING BETWEEN 2 POSITIONS !!!!

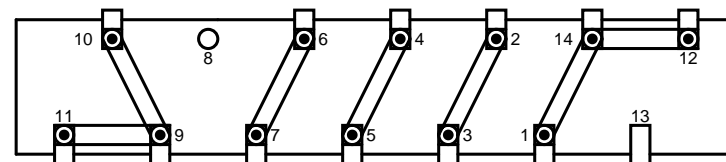
BE CAREFUL, TOP VIEW OF CONNETIONS OUT OF CIRCUIT, YOU CAN SEE FROM AMPLIFIER TOP, HAVE SYMETRICAL NUMBERING REGARDING THIS DRAWING. DO NOT CONFUSE !!!

TOP VIEW IN CIRCUIT



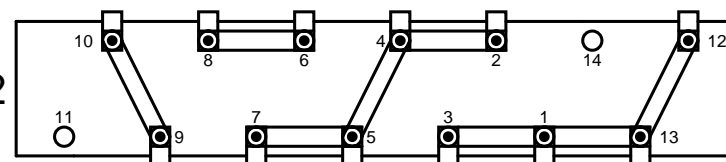
TOP VIEW IN CIRCUIT

BAND 1



○ = CONTACT PAD MAY BE NOT PRESENT

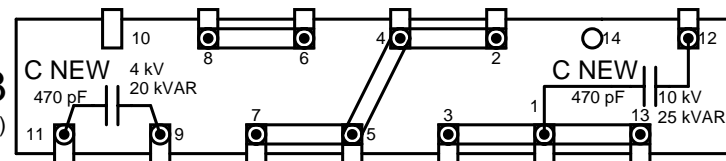
BAND 2



INSIDE DIAMETER OF BAND SWITCH: 53 MM

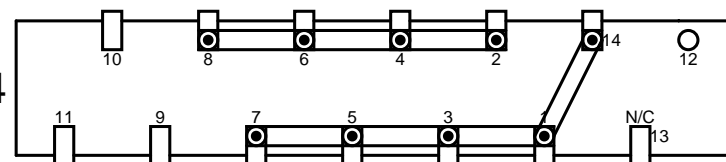
BAND 3

(~356 pF ADDED AT OUTPUT)

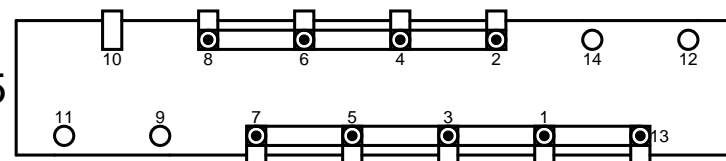


C EQUIVALENT TO 200 pF

BAND 4



BAND 5



**R-140 AMP GU-78b or 2 x GU-43b
MODIFICATIONS OF PI FOR "6LV"**

DATE: 16/10/06 REV: 2 PAGE: 4/5
BY: f1frv@free.fr
DOC N°: AMATEUR RADIO