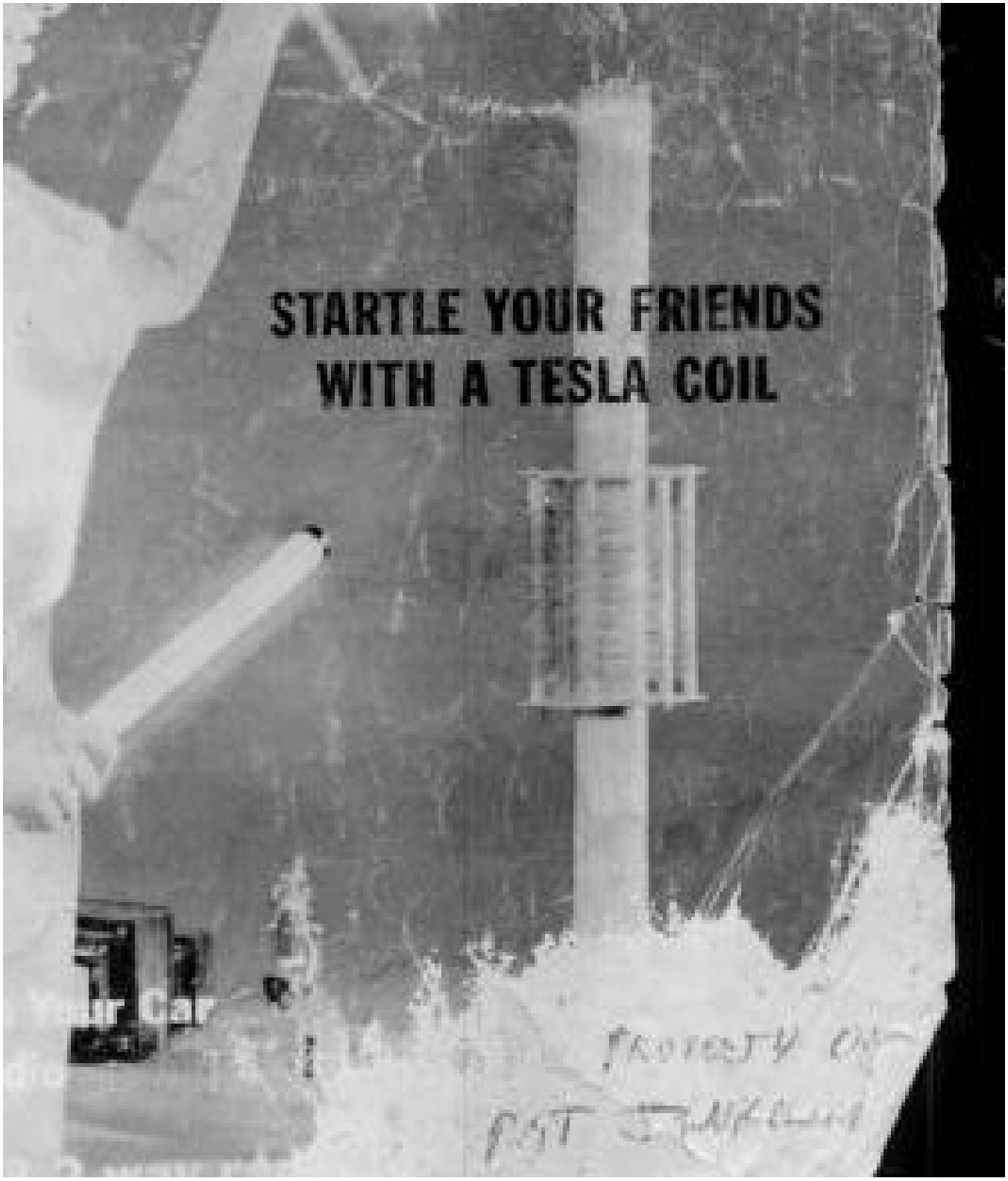
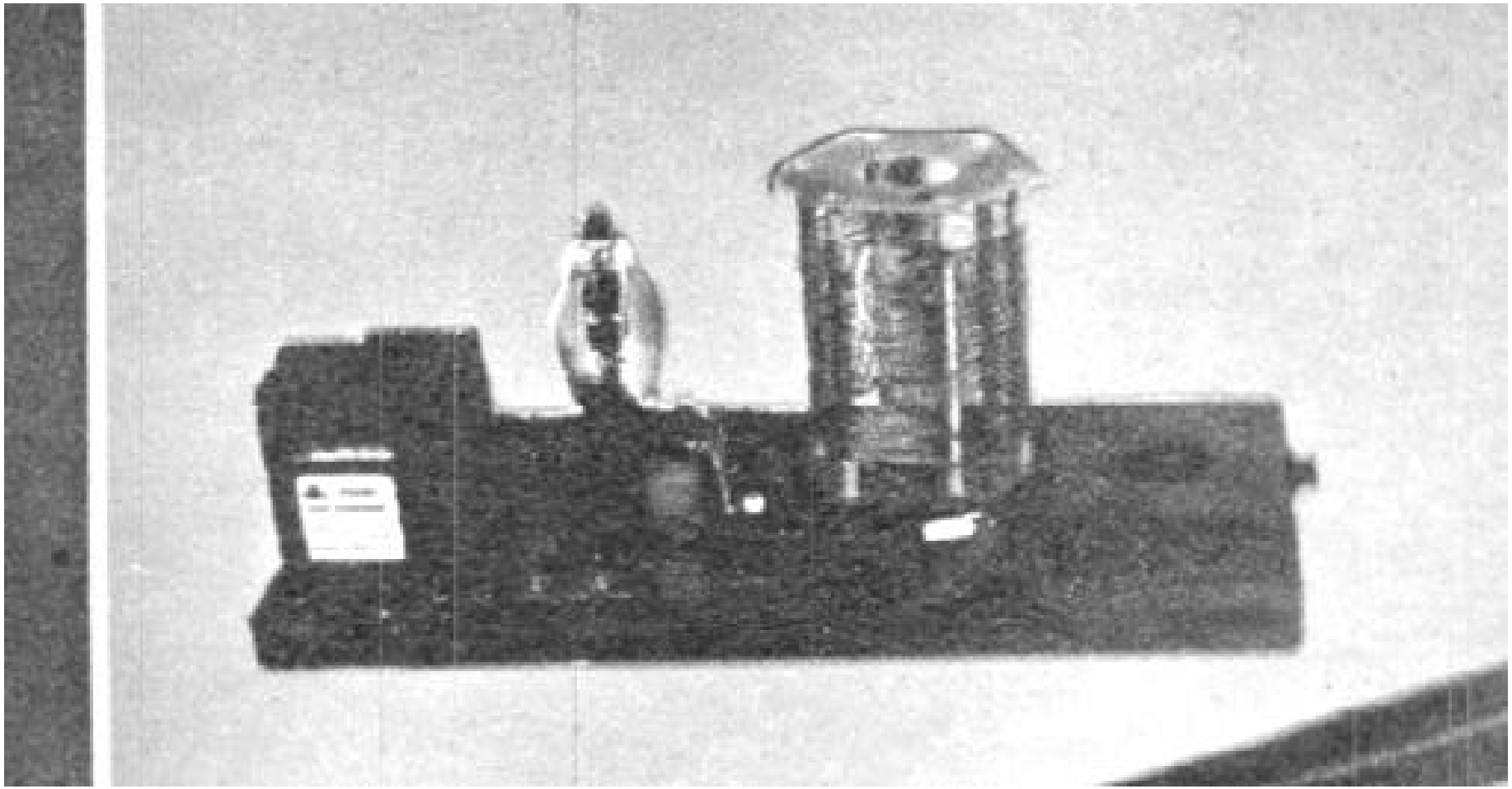
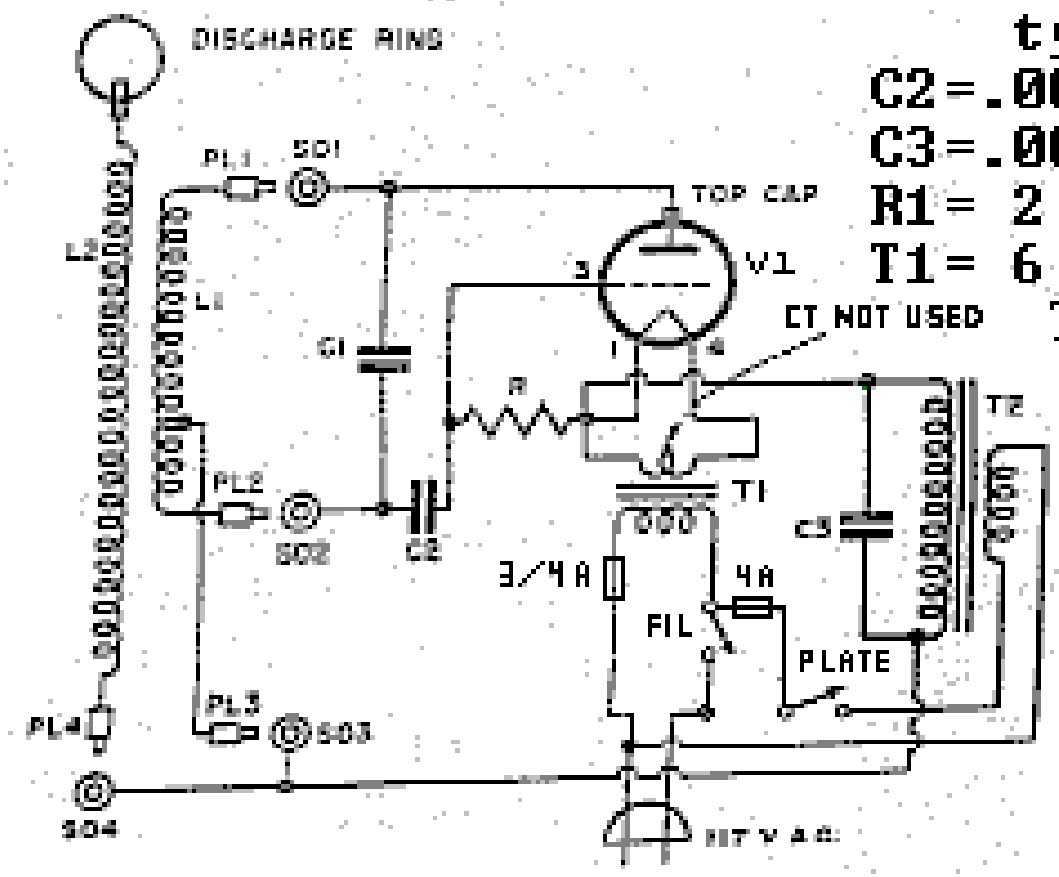
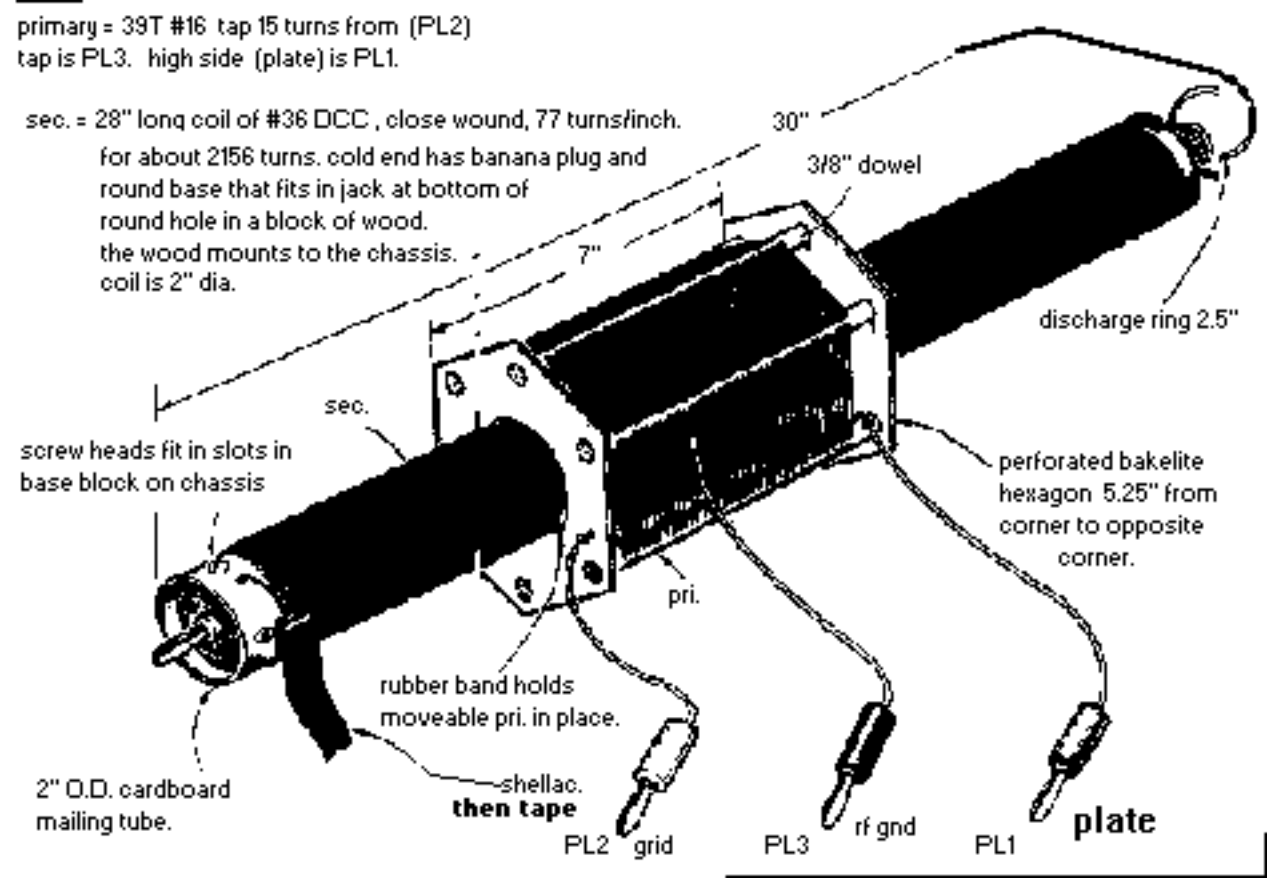

STARTLE YOUR FRIENDS
WITH A TESLA COIL



schematic
oscillator driven tesla coil



V1= 811A tube
C1= .0015 uf/3KV transmitting type.
C2=.0005 uf/10KV
C3=.005 uf/6KV
R1= 2.5K/10W w.w.
T1= 6.3V, 4A
T2=1500V 265 mA.


primary = 39T #16 tap 15 turns from (PL2)
tap is PL3. high side (plate) is PL1.
sec. = 28" long coil of #36 DCC , close wound, 77 turns/inch.
for about 2156 turns. cold end has banana plug and
round base that fits in jack at bottom of
round hole in a block of wood.
the wood mounts to the chassis.
coil is 2" dia.
30"
3/8" dowel
7"
discharge ring 2.5"
sec.
screw heads fit in slots in
base block on chassis
perforated bakelite
hexagon 5.25" from
corner to opposite
corner.
pri.
rubber band holds
moveable pri. in place.
2" O.D. cardboard
mailing tube.
shellac.
then tape
PL2 grid
PL3 rf gnd
PL1 plate

close up of primary.
turns have space between them

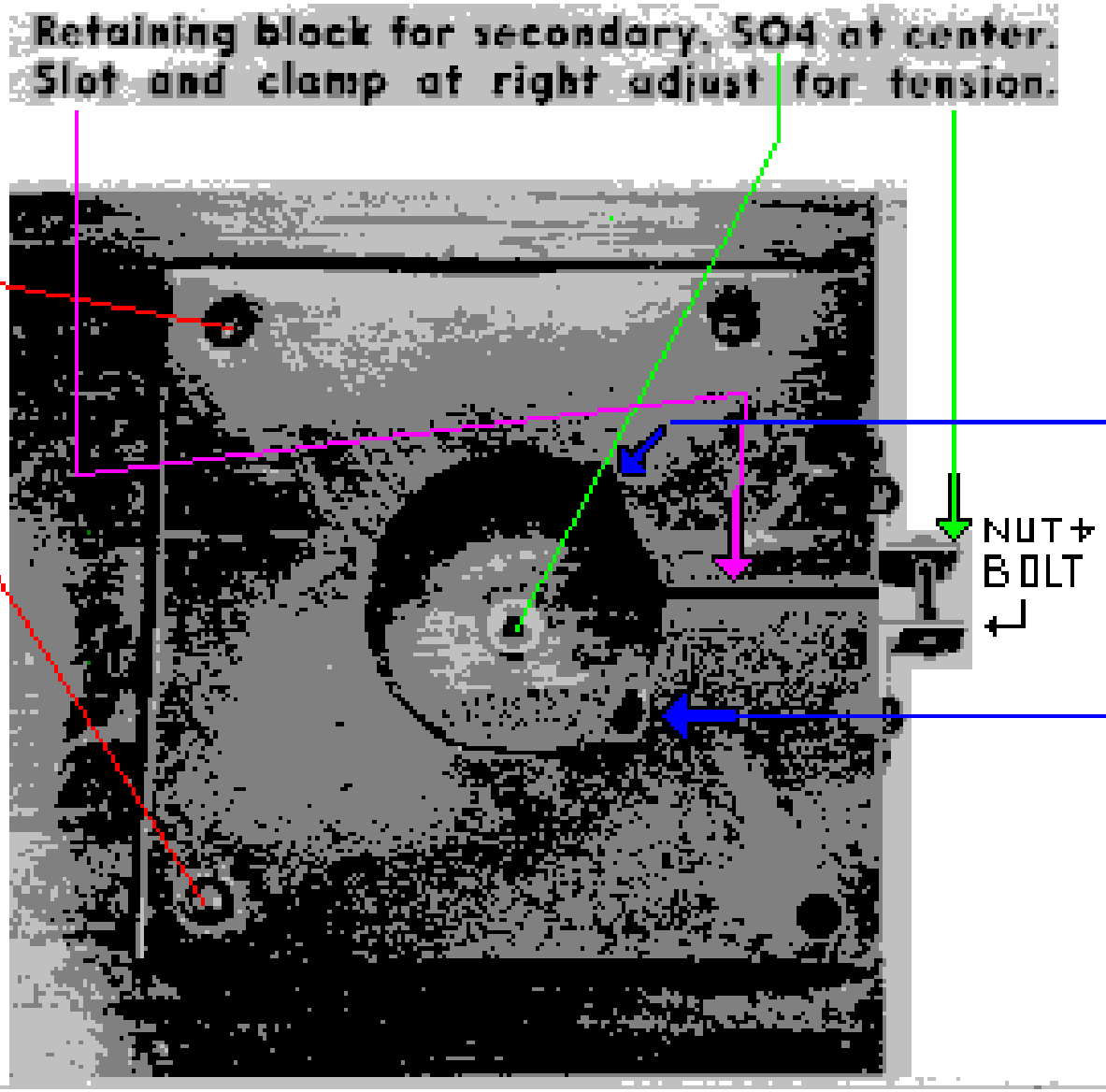
hole in center of primary form is 2.125" so it can easily slide on secondary.

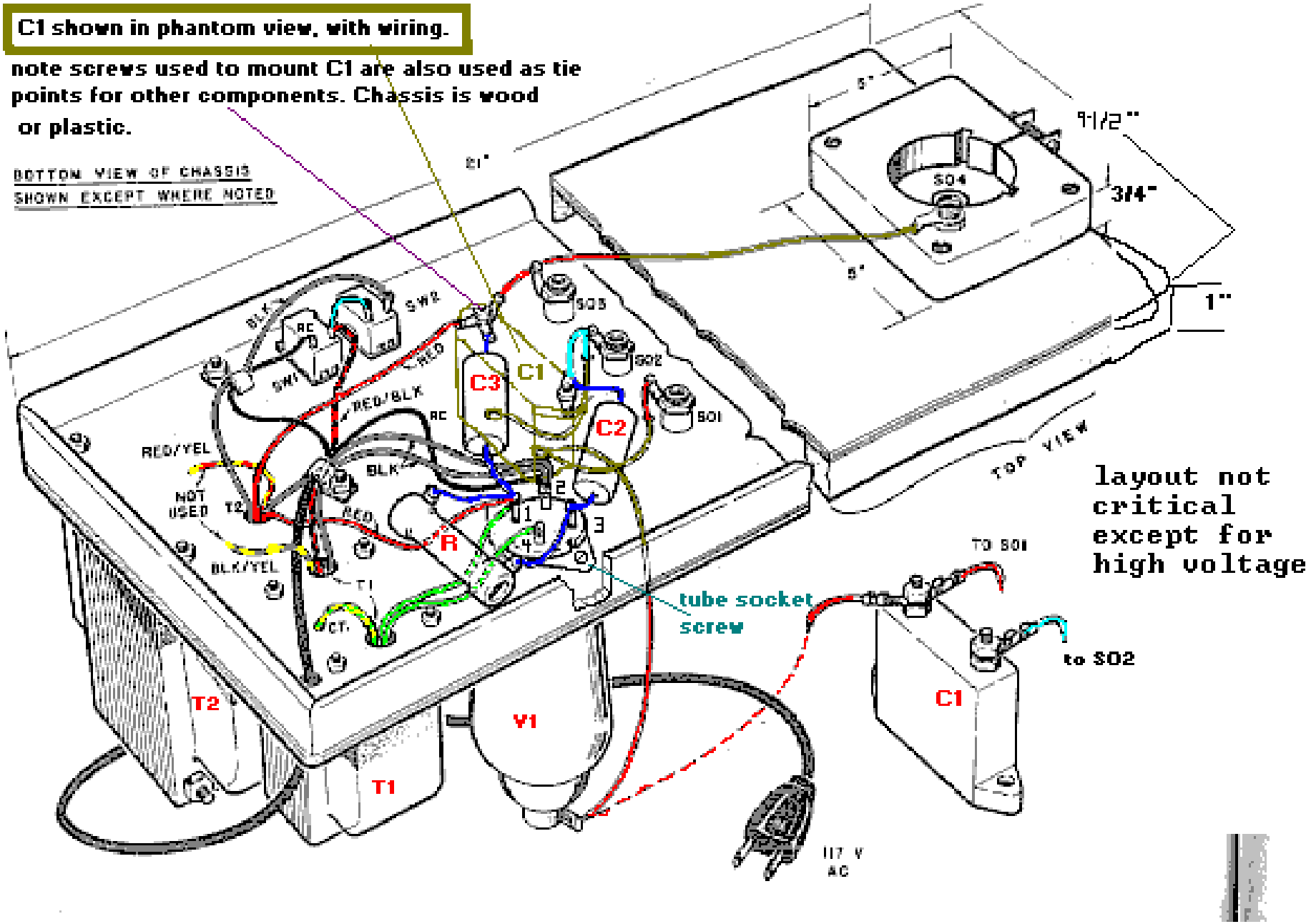
tuning is done by sliding primary up and down on sec. for best resonance.

use a stick to slide primary

WARNING! 1500 volts RMS on this coil, with fault current over one amp!

top view of retaining block. note vertical slots cut for screws on end of secondary.




C1 shown in phantom view, with wiring.
note screws used to mount C1 are also used as tie points for other components. Chassis is wood or plastic.
BOTTOM VIEW OF CHASSIS SHOWN EXCEPT WHERE NOTED
8"
5"
9 1/2"
3/4"
5"
1"
SO4
SO3
SO2
SO1
SW2
SW1
C1
C2
C3
R
V1
T1
T2
RED/BLK
RED/YEL
BLK
BLK/YEL
RED
NOT USED
CT
TOP VIEW
layout not critical except for high voltage
TO SO1
tube socket screw
to SO2
117 V AC