

**MODIFICATION KIT NO.: C056-03002**

**DATE: 12-22-03**

**AFFECTED PRODUCT(S):** TC-10B/TCF-10B Power Line Carrier where the Power Supply alarm is being used. (Refer to product advisory letter # C046-03002)

**AFFECTED MODULE:** Power Supply modules (Style # 1617C38G0x, rev. 3 or lower)

**ITEMS INCLUDED:**

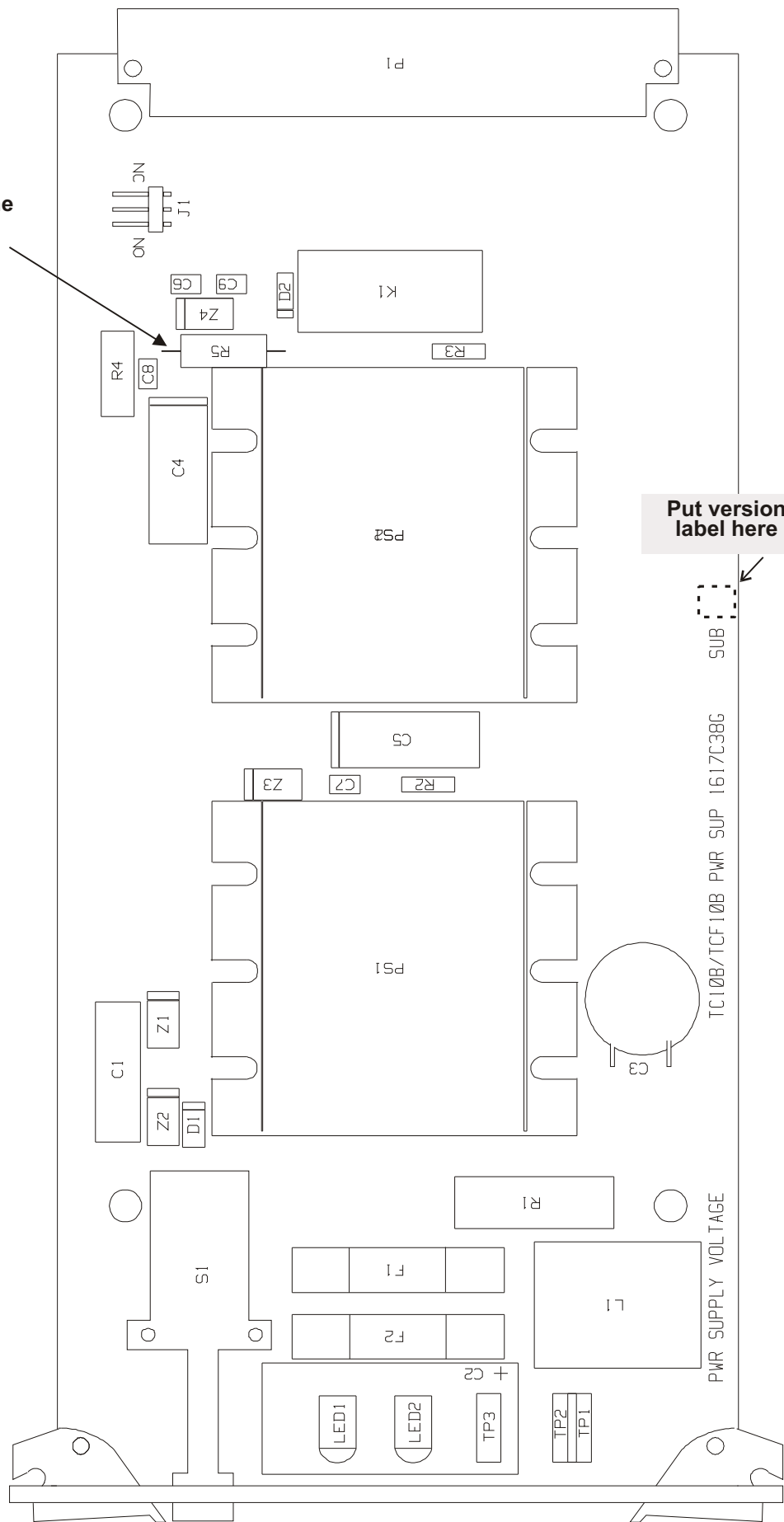
ITEM #	DESCRIPTION	PULSAR PART #	QTY./MODULE
1	28V 5% 5W zener diode (1N5362B)	01I4-5362B-270	1
2	1.50K 1% 1/4W resistor	RM1501FQB0	1
3	This instruction sheet	C056-03002	1
4	Self adhesive rev label with number "5"	none	1

**INSTRUCTIONS:**

**(Tools needed: Soldering iron, solder, small wire cutter, & needle nose pliers)**

1. Be careful to use anti-static precautions when handling the module.
2. Cut R4 (which is a 3.9K ohm 1/2W resistor that is located towards the back upper corner of the PC board close to the jumper J1, underneath the heatsink) completely off the board.
3. Replace R5 (which is a 7.5K ohm 1/2W resistor that is located towards the back upper corner of the PC board close to the jumper J1, underneath the heatsink) with the zener diode included with this kit.
  - If you have a small wire cutter it is easier to do this change without removing the large black heatsink because the removal of this heatsink requires removing 16 screws and avoiding getting the white thermal compound on you. Then later you have to firmly tighten the screws back to ensure good heat transfer.
  - Using a small wire cutter reach underneath the heatsink and cut the end of R5 that faces toward the outer edge of the board as shown in the drawing below. Then just lift this end of the resistor so that it does not touch anything. It is not necessary to completely remove R5. (Note: Be careful to not cut the diode Z4 beside it by mistake.)
  - Then on the bottom (solder side) of the board solder the leads of the enclosed zener diode to the solder pads of R5. Use the drawing below to locate these solder pads and for correct orientation of the zener diode. The leads and body of the zener diode must be kept tight against the board to avoid clearance problems when plugging into the chassis. If necessary you can temporarily remove the module or blank plate to the left of the Power Supply when plugging it in.
4. Also on the bottom (solder side) of the board solder one lead of the enclosed resistor to the solder pad at the end of R4 that is farthest away from the jumper J1 and the other end to the lead of the zener diode that was just added. Use the same drawing below to locate these solder points and to position the body of the resistor so that it's leads don't short to any other component. Again, keep the body of the resistor tight against the board.
5. The Power Supply module should then have the enclosed label "5" put on the (component side) lower edge of the board over the old SUB number after the part number 1617C38G0x to identify that it has been modified. The correct revision (sub) for the board after making this change is sub 5.

Cut this lead of R5 & lift the body up on this end so it doesn't touch anything.



Put version label here

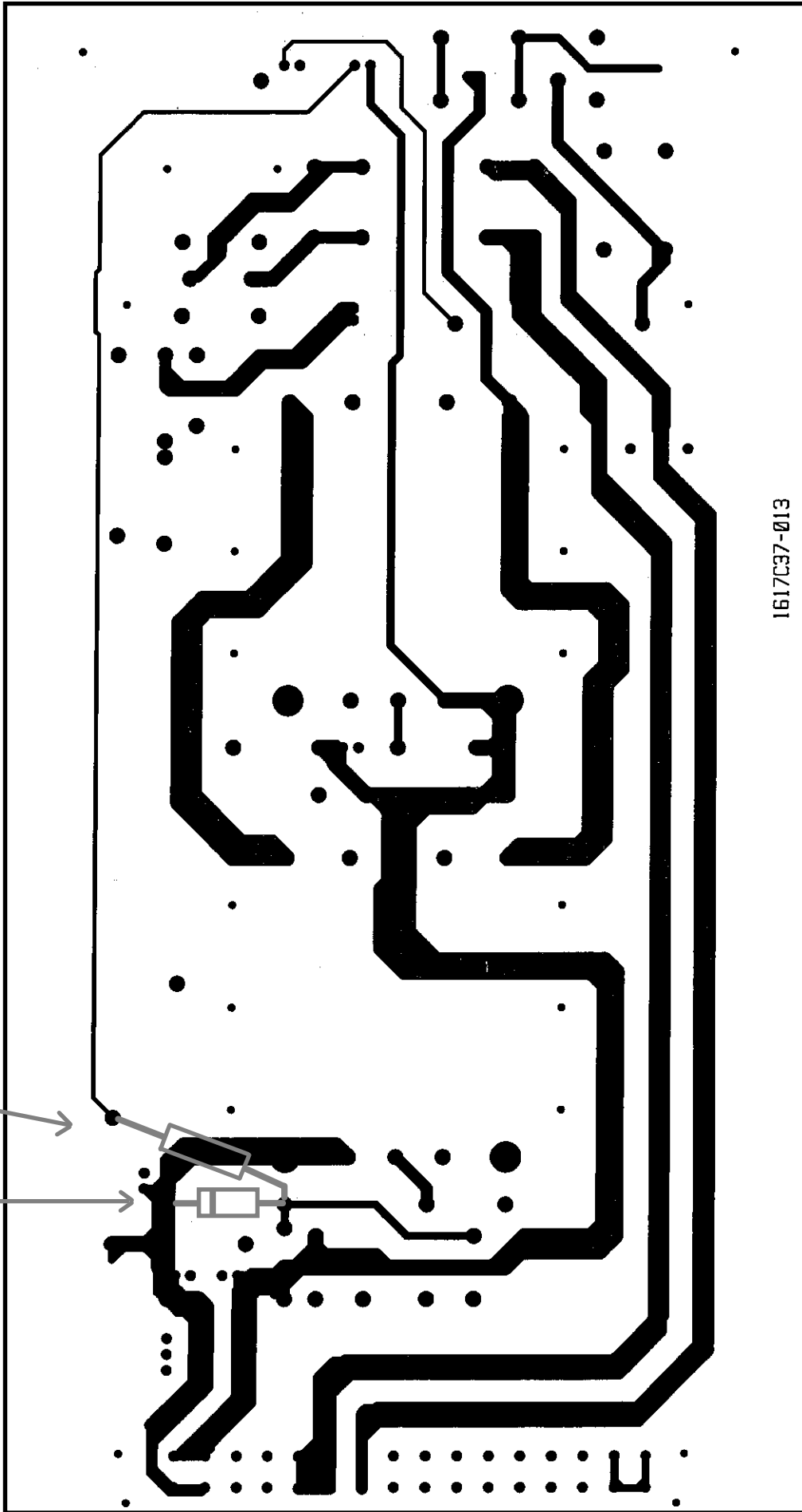


SUB

TC10B/TCF10B PWR SUP 1617C38G

PWR SUPPLY VOLTAGE

Power Supply component side view  
(with heat sink removed)



1617C37-013

Solder resistor between solder pads. Keep leads straight & body of resistor positioned as shown.

Solder zener diode between the solder pads with polarity band as shown.