

**ADJUSTING THE HIGH/LOW DC VOLTAGE
ALARM PC BOARD (GK0045-##)****DESCRIPTION / USAGE**

The GK0045-## alarm pc board senses dc voltage, and provides relay closures for both a low and high voltage threshold. It is used in several different alarm options (EJ0085-##, EJ0143-##, EJ0155-## & EJ0592-##) in the SCR/SCRF Series analog-controlled battery charger lines. It may also be utilized in non-standard options of the AT10.1 and AT30 Series microprocessor-controlled battery charger lines.

BACKGROUND

In December of 2007 the GK0045-## was redesigned, relocating the test points and other components on the printed circuit board. Before adjusting the GK0045-##, identify the version of the board in question. Revision level markings are located within fill-in boxes on the component side of the board. See pages 2 and 4 of this document for examples. For GK0045-## pc boards (Rev. 9 and higher), use the instructions listed below on this page. Otherwise skip to Page 3 of this document.

SETTING THE LOW SIDE

Hook the negative lead of a dc voltmeter to **TP1** and the positive lead to **TP3**, as shown in **Figure 1** on Page 2. Lower the output voltage on the battery charger to the desired low voltage setting. Turn potentiometer (R18) counter-clockwise until you measure 9 Vdc. Turn R18 clockwise slowly until the 9 Vdc starts to decrease to 0. At 2.5 Vdc the low alarm contact will change state. Raise the battery charger voltage and the low alarm relay will reset.

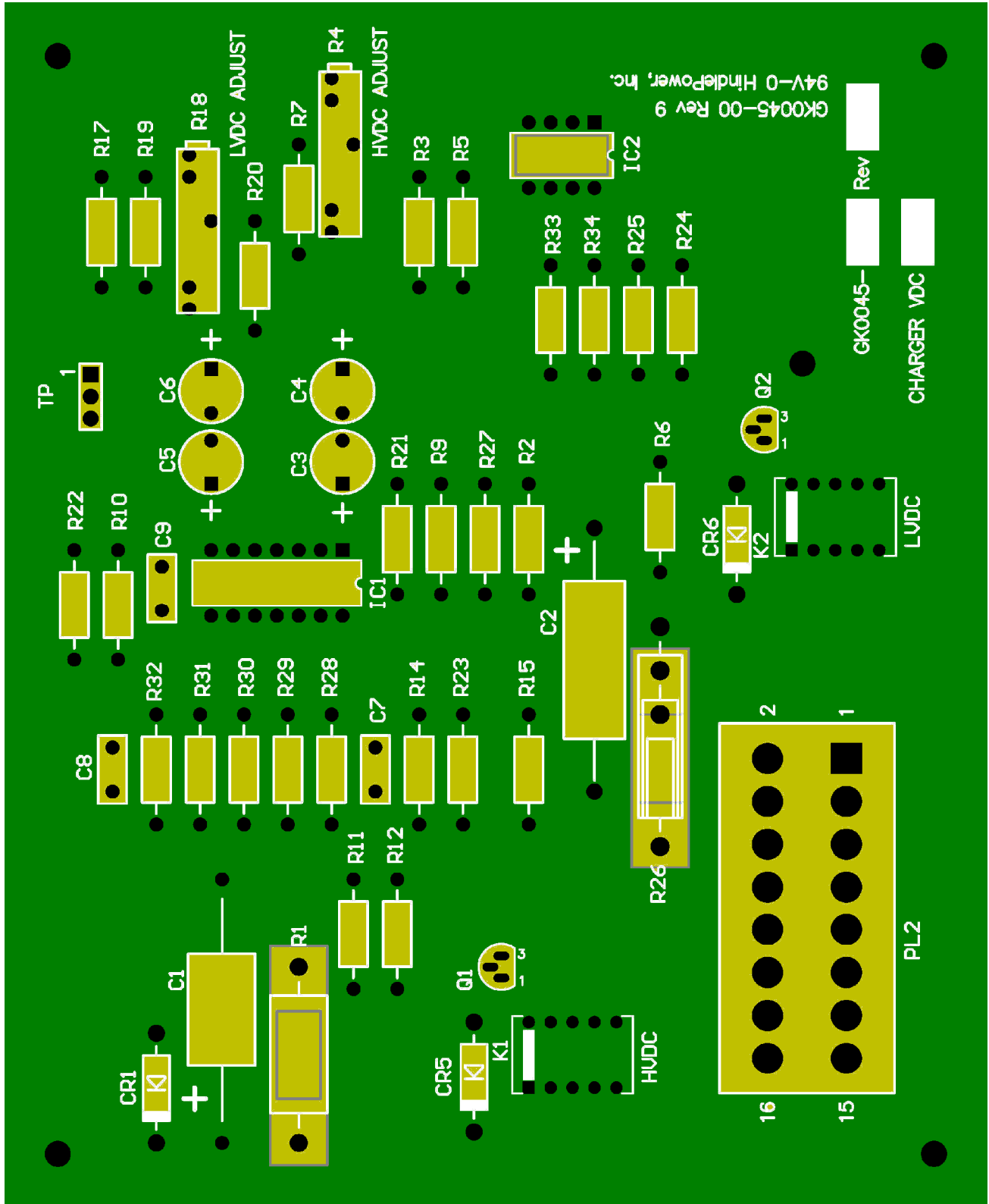
SETTING THE HIGH SIDE

Hook the negative lead of a dc voltmeter to **TP1** and the positive lead to **TP2**, as shown in **Figure 1** on Page 2. Raise the output voltage on the battery charger to the desired high voltage setting. Turn potentiometer (R4) clockwise until you measure 9 Vdc. Turn R4 counter-clockwise slowly until the 9 Vdc starts to decrease to 0. At 2.5 Vdc the high alarm contact will change state. Lower the battery charger voltage and the high alarm relay will reset.

NOTE

The high side of the GK0045-## is used for charger shutdown features.

FIGURE 1: PC Board Layout - GK0045-## REV. 9 (or higher)



**ADJUSTING THE HIGH/LOW DC VOLTAGE
ALARM PC BOARD (GK0045-##)****SETTING THE LOW SIDE (REV. 8 or lower)**

Locate C1 on the GK0045-## pc board and hook the negative lead of a dc voltmeter to C1(-), and the positive lead to the top of **R22** as shown in **Figure 2** on Page 4. Lower the output voltage on the battery charger to the desired low voltage setting. Turn potentiometer (R18) counter-clockwise until you measure 9 Vdc. Turn R18 clockwise slowly until the 9 Vdc starts to decrease to 0. At 2.5 Vdc the low alarm contact will change state. Raise the battery charger voltage and the low alarm relay will reset.

SETTING THE HIGH SIDE (REV. 8 or lower)

Locate C1 on the GK0045-## pc board and hook the negative lead of a dc voltmeter to C1(-), and the positive lead to the top of **R10** as shown in **Figure 2** on Page 4. Raise the output voltage on the battery charger to the desired high voltage setting. Turn potentiometer (R4) clockwise until you measure 9 Vdc. Turn R4 counter-clockwise slowly until the 9 Vdc starts to decrease to 0. At 2.5 Vdc the high alarm contact will change state. Lower the battery charger voltage and the low alarm relay will reset.

NOTE

The high side of the GK0045-## is used for charger shutdown features.

FIGURE 2: PC Board Layout - GK0045-## REV. 8 (or lower)

