INSTRUCTION MANUAL

KEPCO An ISO 9001 Company.

ATE-DMG FAST MODE KIT

ATE-DMG
FAST MODE CORRECTION
FIELD UPGRADE KITS 219-0526

1. DESCRIPTION

Kepco Kit 219-0526 for ATE-DMG power supplies allows all models with external reference support to operate properly in Fast Mode. The kit contains the components required to modify adapter assembly A11. Although not required, a front panel-mounted resistor is included to be installed at the user's discretion to make fielded units identical to currently manufactured models.

2. INSTALLATION OF COMPONENTS

2.1 MATERIAL REQUIRED (SEE TABLE 1.)

TABLE 1. MATERIAL REQUIRED

MATERIAL	KEPCO PART NUMBER	LOCATION	QUANTITY
• PROM (replaces U16 in Board A7)	250-0683	Provided in this Kit	1
• Resistor 10K, 1%, 1/8W (new R12 on A11)	115-2174	Provided in this Kit	1
• Resistor 1.1K, 1%, 1/8W (Optional - replaces R102 on front panel)	115-2176	Provided in this Kit	1
• Capacitor, 0.022UF, 200V, 10% (replaces A1C24)	117-0377	Provided in this Kit	1
• Capacitor, 1UF, 50V, 10% (new C6 on A11)	117-0999	Provided in this Kit	1
• ESD (Electrostatic Discharge) wrist strap	114-0080	Provided in this Kit	1
• IC Extractor	114-0079	Provided in this Kit	1
• Phillips Screw Driver	N/A	Not Supplied	N/A

2.2 DISASSEMBLY PROCEDURE

1. Turn power off, disconnect the unit from source power and remove line cord.
2. Remove the top cover of the unit by removing 20 screws as follows: two at top of the rear panel and nine on each side.

2.3 PROM REPLACEMENT PROCEDURE (SEE FIGURE 1)

1. Locate PROM, U16 on Digital board A7 (see Figure 1).
2. Take the wrist strap from kit and use the peel and stick area to connect the wrist strap to the chassis of the ATE-DMG. Place the wrist strap on your arm as indicated by the instructions for the wrist strap.

CAUTION: FAILURE TO USE THE ESD WRIST STRAP MAY DAMAGE THE PROM!

3. Touch the IC tube to the chassis of the ATE-DMG. Open one end.
4. Pry out the PROM using an IC extractor. Insert the hook, first into one slot and then the other, and gently pry out the PROM. Place the PROM in the tube and close the tube.
5. Open the other end of the IC tube and remove the replacement PROM from the tube.
6. Insert the PROM into the socket, ensuring the dot is oriented as shown in Figure 1.

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7. Reclose the IC tube. Remove wrist strap and disconnect it from the ATE-DMG chassis.

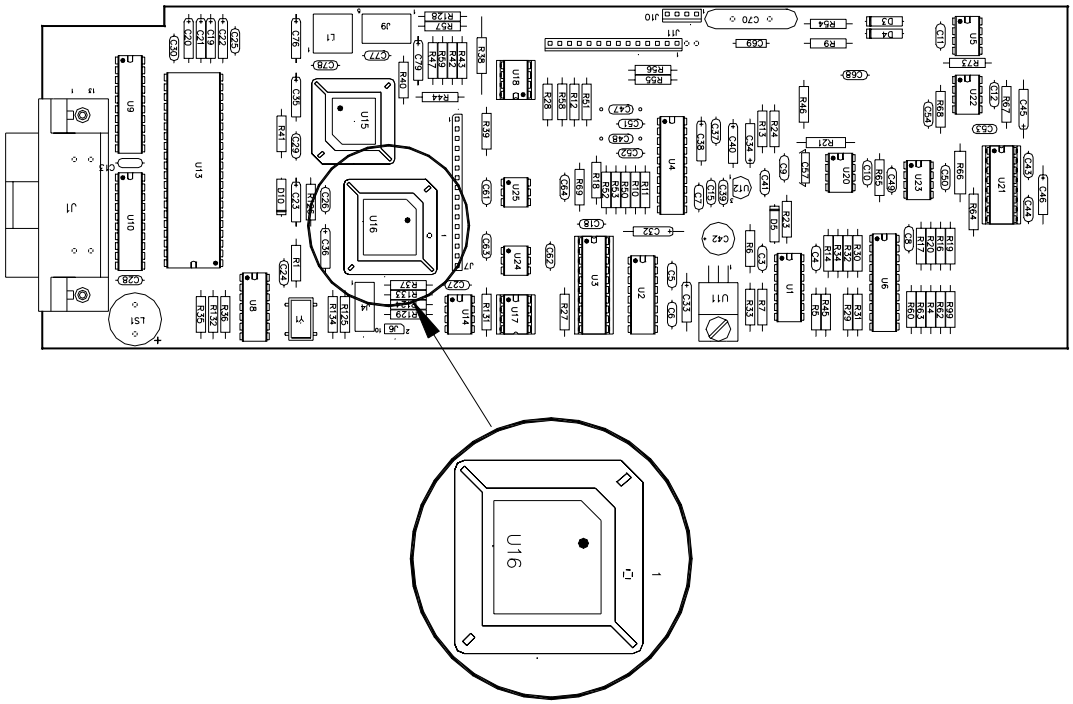


FIGURE 1. DIGITAL BOARD A7 PROM LOCATION

2.4 ADAPTER ASSEMBLY A11 COMPONENT ADDITIONS PROCEDURE (SEE FIGURE 2)

1. At the rear panel, loosen two screws and disconnect adapter assembly A11.
2. Gain access to A11 components (see Figure 2) by removing two screws securing connector A11J1 to the shell.
3. Connect one end of new capacitor C6 (P/N 117-0999, 1UF, 10%, 50V) to Capacitor C5 closest to pin 12 of U2. Mount vertically, close to J2.
4. Mount one end of new resistor R12 (P/N 115-2174, 10K, 1%, 1/8W) vertically, connecting one end to R6 on leg closest to J2. Connect other end to free end of C6 which is also mounted vertically.

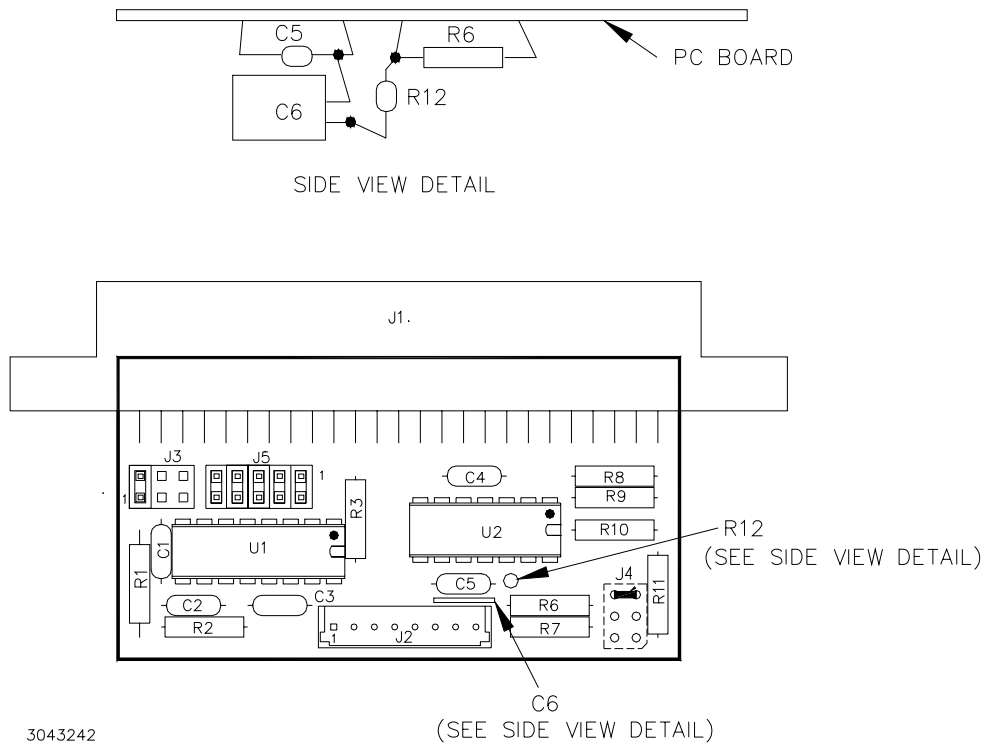


FIGURE 2. ADAPTER ASSEMBLY A11, COMPONENT LOCATION

2.5 REASSEMBLY

1. Attach the adapter assembly cover to adapter assembly A11 using two screws.
2. Attach the cover to the chassis using 20 screws.
3. Install the power cord and connect the unit to source power, then refer to ATE-DMG Technical Manual to initialize and calibrate the unit.

2.6 INITIALIZATION AND CALIBRATION

Refer to ATE-DMG Power Supply technical manual.

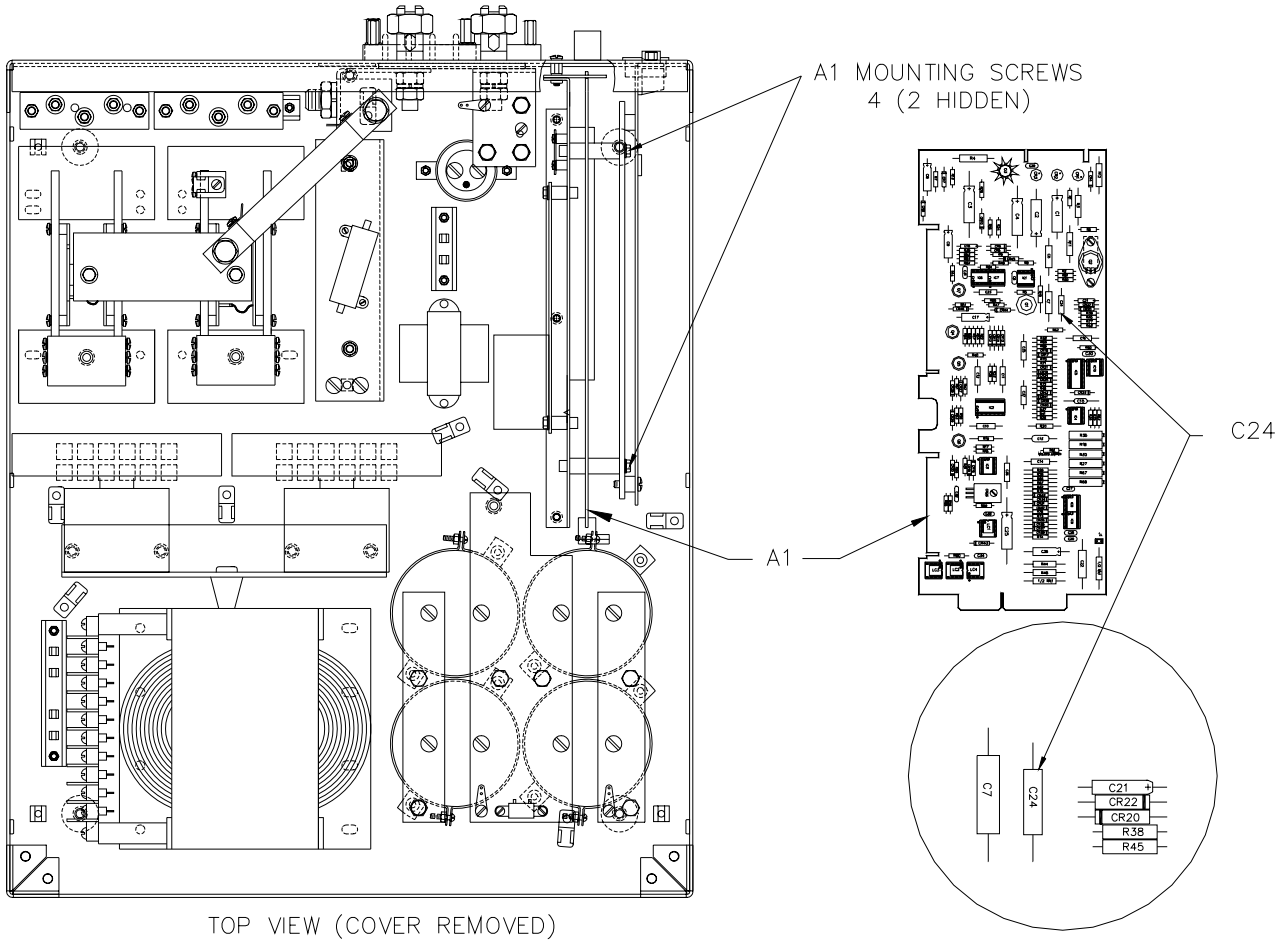
2.7 OPTIONAL UPGRADE PROCEDURE (SEE FIGURE 3)

This procedure is not required, however replacing the components indicated will ensure that full output current capability is not influenced by component tolerances.

1. At the front panel, remove seven screws and separate the front panel from the chassis.
2. Locate resistor R102 and replace with new resistor R102 (P/N 115-2176, 1.1K, 1%, 1/8W).
3. Reattach front panel to chassis using six screws.
4. Remove four screws and unplug A1 assembly from chassis.
5. Replace C24 with new capacitor C24 (P/N 117-0377, 0.022UF, 200V, 10%
6. Reinstall A1 assembly and secure using four screws.

2.8 FINAL REASSEMBLY

1. Install top cover using 20 screws removed during disassembly.
2. Mark new model number as follows: add -26857 if both standard and optional changes were installed. Add-26858 if the optional components were not installed.



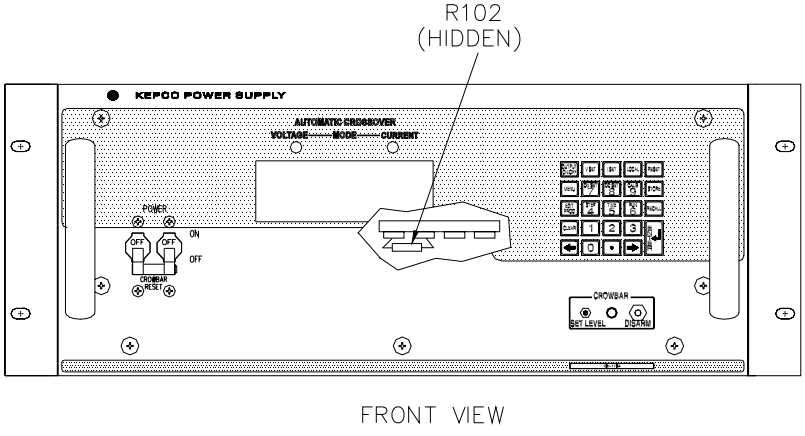


FIGURE 3. COMPONENT LOCATIONS, RESISTOR R102 AND CAPACITOR A1C24