

INSTRUCTION MANUAL



KEPCO An ISO 9001 Company.

**KIT
219-0515**

BIT 4886 FIRMWARE UPGRADE

1. DESCRIPTION

The Kepco KIT Model 219-0515 contains the material to upgrade BIT 4886 Interface Cards, Rev 13 or Rev 14 that have been previously installed in a BOP power supply to Rev 13A and Rev 14A, respectively, moving to Firmware Version 2.0. This instruction sheet provides procedures for installing the components provided.

2. INSTALLATION

2.1 MATERIAL REQUIRED (SEE TABLE 1.)

TABLE 1. MATERIAL REQUIRED

MATERIAL	LOCATION	QUANTITY
PROM U4, Kepco P/N 250-0663 (replacement)	Provided in this Kit	1
Interface Bus Controller U40, Kepco P/N 250-0133 (new)	Provided in this Kit	1
Resistor R75, 2.2K Ohms, 5%, 1/4W, Kepco P/N 115-2382 (new)	Provided in this Kit	1
Extractor	Provided in this Kit	1
ESD (Electrostatic Discharge) wrist strap.	Provided in this Kit	1
Philips Screw Driver	Not Supplied	N/A

2.2 UPGRADE PROCEDURE

1. Remove a-c power to BOP by disconnecting line cord.
2. Remove BOP cover (see Section 5, Figure 5-1 of your BOP Instruction Manual).
3. Remove the BIT 4886 Interface card from the BOP as follows (See Figure 2-2 of BIT 4886 Technical Manual):
 - Step 1. Unplug 3 pin Connector from Transformer from BIT 4886 Card, Location #13.
 - Step 2. Unplug Cable #2 (5-position connectors) from the BIT 4886 Interface Card, (the other end of the cable with Location #2 on BOP A1 Assembly).
 - Step 3. Unplug Cable #1 (18-position connectors) from the BIT 4886 Interface Card, .
 - Step 4. Remove the lockwashers, and knurled nut securing Connector J204 to hex spacer at location #3, then remove Connector J204.
 - Step 5. Remove the knurled nuts and lockwashers securing the BIT 4886 Card to hex spacers and remove BIT 4886 Card.

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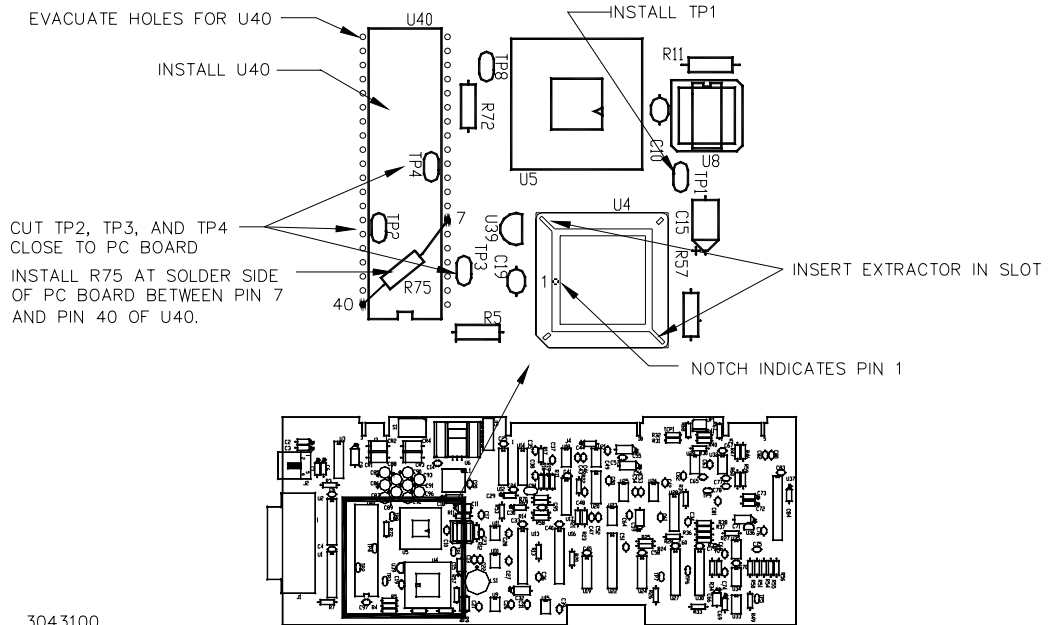


FIGURE 1. COMPONENT LOCATION

4. Cut test points TP2, TP3, and TP4 (see Figure 1) as close to the PC board as possible. Save test points for step 7
5. Evacuate the holes shown in Figure 1 for U40.
6. Install Bus Interface controller chip U40 from kit as shown in Figure 1 and solder in place.
7. Install one test point removed in step 4 in position TP1 as shown in Figure 1 and solder in place.
8. Install resistor R75 from kit on solder side of PC board as shown in Figure 1 and solder in place.
9. Locate the small depression or notch in the PROM U4 as shown in Figure 1. This is pin 1 of the PROM.

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

10. Connect the wrist strap to the chassis of the BOP using the peel and stick tape. Place the strap on your wrist as indicated by the instructions for the wrist strap.
11. Touch the IC tube to the chassis of the BOP. Open one end.
12. Use the extractor and insert the hook, first into one slot and then the other, and gently pry out PROM U4. Place the PROM in the tube and close the tube.
13. Open the other end of the IC tube and remove the replacement PROM U4 from the tube.
14. Insert the PROM into the socket, insuring pin one is as shown in Figure 1.
15. Reclose the IC tube. Remove wrist strap and disconnect it from the BOP.
16. Reinstall the BIT 4886 Card in the BOP by referring to the BIT 4886 Technical Manual (downloadable at www.kepcopower.com/support), PAR. 2.3, steps 9 through 13 and steps 16 through 18.
17. Reconnect power cord and turn on the BOP. Verify the unit beeps and initializes normally.