

## Replacement Circuit Board for SKB/C/D62U Actuators



### Product Description

This kit contains the circuit board, plastic retainer, screws, and wrench needed to replace the circuit board on SKB/C/D62U electric actuators.

### Product Number

466857488

### Warning/Caution Notations

<b>WARNING</b>		Personal injury/loss of life may occur if a procedure is not performed as specified.
<b>CAUTION</b>		Equipment damage, or loss of data may occur if the user does not follow a procedure as specified.

### Required Tools

- Small and medium flat-blade screwdrivers
- Torx 10 wrench (provided)

### Expected Installation Time

15 to 20 minutes

### Prerequisites



#### WARNING:

Disconnect power to the actuator before removing the cover.



#### CAUTIONS

- Before you replace the PC board, make sure that you are electrostatically discharged (by touching a grounded surface).
- Remain grounded during replacement (for example, wearing a wrist strap with a grounding cable).
- Place the PC board on a surface free from electrostatic charge (the packaging).
- Make sure devices and tools used are electrostatically discharged.
- Touch the PC board only at the edges and do not touch the pins and leads.

### Installation

#### Removing the old circuit board

1. Disconnect the power.
2. Remove the actuator cover.
3. Label the wires.
4. Loosen wires from the terminal block. See Figure 1.

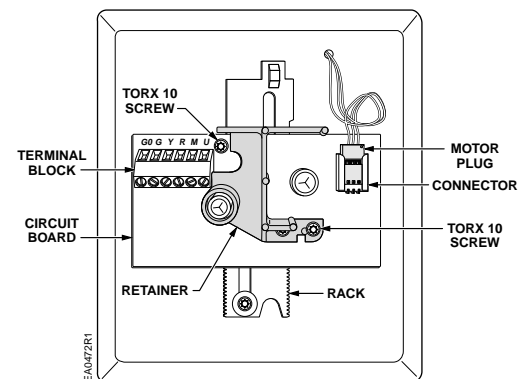


Figure 1. Location of Parts Under the Cover.

#### Installation, Continued

5. Release the motor plug from the connector. You may need to use a small screwdriver to pry it loose.
 

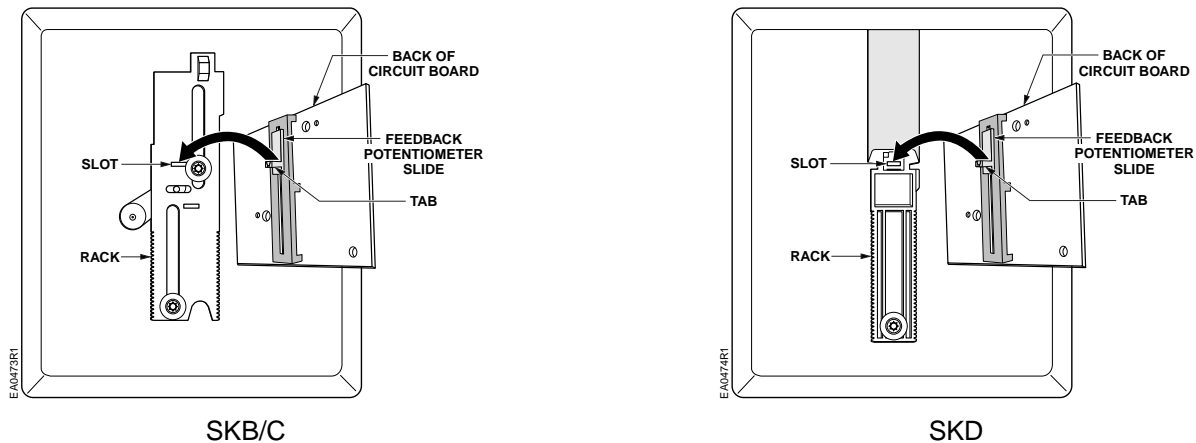
**NOTE:** Be careful not to damage the motor plug.
6. Using the Torx 10 wrench, remove the two screws which hold the circuit board in place.
7. Remove the plastic retainer.
8. Lift out the old circuit board. Turn it over and check the position of the tab on the black feedback potentiometer slide. Discard the old board.

## Installing the new circuit board

1. Turn the new circuit board over and position the feedback potentiometer slide tab in the approximate position as you saw the tab on the old circuit board. See Figure 2.
2. Insert the feedback potentiometer slide tab into the slot on the rack and line up the board with the two screw holes.
3. Attach the board with the upper left-hand screw. See Figure 1.
4. Place the plastic retainer over the circuit board.
5. Secure the plastic retainer and the circuit board with the second screw.
6. Connect the motor plug to the connector. The plug is keyed for proper orientation.

7. Connect the electrical wires, as labeled, to the terminal block.
8. Run a functional test.
  - a. Apply power from 0 to 10 Vdc, 10 to 0 Vdc, and back to 10 (or apply power from 4 mA to 20 mA, 20 mA to 4 mA, and back to 20 mA).
  - b. Observe the stem movement.
  - c. If the stem fails to follow the input signal during the test, the feedback potentiometer slide tab is probably not inserted fully into the slot of the rack.
  - d. Disconnect the electrical wires, the motor plug, screws and plastic retainer. Follow the instructions from *Step 2*.
9. Replace the actuator cover.

The installation is now complete.



**Figure 2. Attaching the New Circuit Board.**

## Reference

Technical Instructions

*Flowrite EA 599 Series SKB/C Electronic Valve Actuator Proportional Control (155-163P25)*

*Flowrite EA 599 Series SKD Electronic Valve Actuator Proportional Control (155-180P25)*

Installation Instructions

*SKB/C Electronic Valve Actuator (129-185)*

*SKD Electronic Valve Actuator (129-217)*

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