



REPLACEMENT INSTRUCTIONS

DIGITAL CONTROL MODULE (DCM-3) REPLACEMENT KIT P/Ns 12-8062-31, -33 & -34

PURPOSE

The purpose of these instructions is to provide a step-by-step method for replacing the Digital Control Module (DCM-3) of the Group 42 actuator.

Maintenance should be performed in a clean working environment. If possible, the actuator should be removed from its mounting point and taken to a maintenance room or workstation.

REQUIRED TOOLS

- 1/2" socket or wrench
- #1 Philips head screwdriver
- Scotch™ 847 gasket adhesive or equivalent
- Torque wrench appropriate for 10 lb-ft
- Torque screwdriver (#1 Philips) appropriate for 19 lb-in



WARNING
Electrical shock hazard—disconnect power before proceeding. Remove the actuator from line voltage and shut off any external power sources feeding the auxiliary switches.

PROCEDURE

Remove the old DCM board:

Refer to Figure 1 for component identification.

1. Remove power from the actuator.
2. Remove the terminal enclosure cover by loosening the (6) 5/16-18 hex head captive screws.
3. Locate the DCM board within the terminal enclosure.
4. Remove the wire harness connector from the top of the DCM board and any other wire connections.



CAUTION
Observe precautions for handling electrostatic sensitive devices.

5. Using a Philips head screwdriver, loosen the (4) #10-32 captive fastening screws. Carefully slide the DCM board out of its socket.
6. Place the old DCM board into an anti-static bag and set aside.

Install the new DCM-3 board



CAUTION
Observe precautions for handling electrostatic sensitive devices.

7. Remove the DCM-3 board from its anti-static bag.
8. Carefully plug the new DCM-3 board into its socket on the chassis bracket, located within the terminal enclosure of the actuator.
9. Use a Philips head screwdriver to tighten the (4) #10-32 captive fastening screws on the board. Torque to 19 lb-in (2 N•m).
10. Reattach the wire harness connector to the plug located at the top of the DCM-3 board and the wire connector behind the local control board.
11. Inspect the terminal enclosure cover gasket and replace, if necessary. If the gasket is in good condition, skip to Step 15.
12. Clean the mating face on the actuator body to remove all gasket material and adhesive. Ensure that the mating surface is free of defects such as dents or gouges.
13. Apply a thin film of gasket adhesive (Scotch™ 847 or equivalent) to the mating face of the actuator body.
14. Firmly press the new gasket into place and allow time for the adhesive to set before continuing.
15. If the actuator has been removed from its mounting location for maintenance, reinstall it. It will be necessary to temporarily install the enclosure cover to protect the electronics during the remounting process.

Continued

16. Restore power to the actuator. The new DCM-3 will need to be calibrated. Please refer to the calibration section of Beck instruction manual 80-0042-01 for proper calibration instructions.
17. Reinstall the terminal enclosure cover and tighten the (6) 5/16-18 hex head captive screws to 10 lb-ft (14 N•m) torque.
18. Return the actuator to service.

Table 1: DCM-3 Replacement Kit

Part Number	Description
22-5014-59	DCM-3 Board
22-5014-29	DCM-3 Board (FF)
22-5014-49	DCM-3 Board (Profibus)
20-0660-76	Terminal Enclosure Gasket

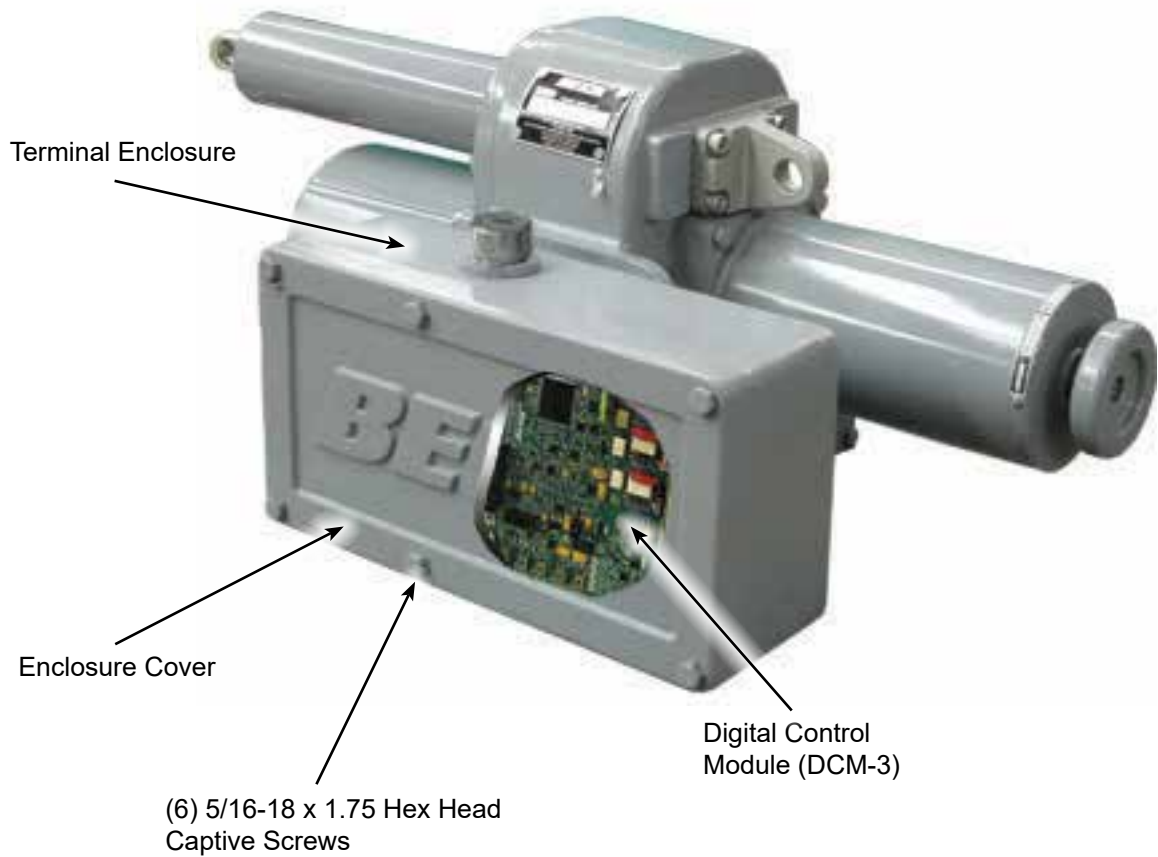


Figure 1

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