

## REPLACEMENT INSTRUCTIONS

# FEEDBACK POTENTIOMETER REPLACEMENT KIT P/N 12-8064-13

### **PURPOSE**

The purpose of these instructions is to provide the field maintenance technician with a step-by-step method for replacing the feedback potentiometer.

Maintenance to the Group 42 should be performed in a clean working environment. If possible, the drive should be removed from its mounting point and taken to a maintenance room or workstation.

#### REQUIRED TOOLS

1/2" and 3/8" socket or wrench
Scotch™ 847 gasket adhesive or equivalent
Small, flat-tipped screwdriver
Torque wrench appropriate for 10 lb-ft

#### **WARNING**

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

#### **PROCEDURE**

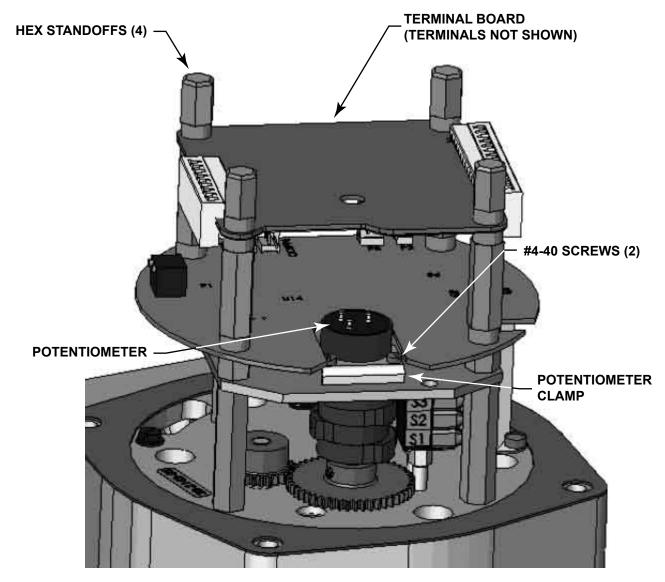
Refer to Figure 1 for component identification.

- 1. Remove power from the drive.
- 2. Remove the control end cover by loosening the (4) 5/16-18 hex head captive screws.
- 3. Remove the (4) 3/8" hex standoffs from the terminal board. Use a 3/8" hex wrench.
- 4. Remove the terminal shields and disconnect plugs P1 and P2.
- 5. Carefully lift the terminal board protective shield off the threaded standoffs.
- 6. Locate the potentiometer plug and remove it from terminal P4.
- 7. Remove the (2) #4-40 slotted head screws and the clamp that holds the feedback potentiometer to the cam and switch assembly mounting bracket.

- 8. Pull the potentiometer assembly straight up and out of the switch shaft.
- 9. Obtain the new potentiometer assembly and install onto the switch shaft.
- 10. Reinstall the clamp and the (2) #4-40 slotted head screws to retain the potentiometer.
- 11. Connect the potentiometer plug to terminal P4
- 12. Reinstall the terminal board protective shield onto the threaded standoffs.
- 13. Reconnect the plugs to P1 and P2 and reinstall the terminal shields.
- 14. Reinstall the (4) 3/8" hex standoffs to retain the terminal board.
- 15. Inspect the control end cover gasket and replace, if necessary. If the gasket is in good condition, skip to step 19.
- 16. Clean the mating face on the drive body and the cover to remove all gasket material and adhesive. Ensure that the surfaces are free of defects, such as dents or gouges.
- 17. Apply a thin film of gasket adhesive (Scotch™ 847 or equivalent) to the mating face of the drive.
- 18. Firmly press the new gasket into place and allow time for the adhesive to set before continuing.
- 19. Connect power to the drive.
- Modulate the Demand signal to run the drive through its full range of motion. Verify the correct drive response.
- 21. Modulate the signal to several intermediate levels and note if the drive attains the proper position.
- 22. If the drive responds correctly, reinstall the control end cover, tighten the (4) 5/16-18 hex head captive screws to 10 lb-ft torque, and return the drive to service.
- 23. If the drive does not respond correctly, refer to the troubleshooting and calibration sections of Beck Instruction Manual 80-0042-00.

Table 1: Feedback Potentiometer Replacement Kit

Part Number	Description
20-3062-03	Potentiometer Assembly
10-8080-02	Control End Gasket



OPTION 5 CONTROL END SHOWN, OPTION 7 SIMILAR

Figure 1