



REPLACEMENT INSTRUCTIONS

CONTROL END REPLACEMENT KIT P/NS 12-8064-40, -41, -42, -43

PURPOSE

The purpose of these instructions is to provide a step-by-step method for replacing the Option 3, Option 5 and Option 7 control ends. The replacement control end assembly has been fully calibrated at the factory. This replacement procedure will return the drive to a close approximation of its default factory calibration. Do not calibrate the drive until this procedure is complete, and then only if necessary. Refer to Beck Instruction Manual 80-0042-00 for complete calibration instructions.

Maintenance to the Group 42 control drive 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" socket or wrench
- #1 Phillips head screwdriver
- Torque wrench appropriate for 6 and 10 lb-ft (3/16" hex driver and 1/2" socket)
- Wire cutters
- Loctite® Threadlocker 222™ or equivalent
- 3M™ Scotch-Weld™ Nitrile High Performance Rubber & Gasket Adhesive 847 or equivalent

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

Remove the old control end:

Refer to Figure 1 for component identification.

CAUTION

Observe precautions for handling electrostatic sensitive devices

1. Disconnect the power from the drive.
 2. Remove the control end cover by loosening the (4) 5/16-18 hex head captive screws.
 3. The control end is a multilevel unit which will be replaced in its entirety. The first level of the control end assembly is the terminal wiring board for the control assembly and the drive. Record the wire connections attached to this board, being very specific about wire colors and the appropriate wire terminals.
 4. Remove all wire connections from the terminal board on the control end assembly. Cut any cable ties that retain the wiring to the control end assembly.
 5. Remove the (4) 1/4-28 socket head screws which retain the control end assembly to the drive body. These screws are partially hidden behind the P.C. board of the control end assembly, and care must be taken when removing and/or installing them.
 6. Carefully remove the control end assembly from the drive.
- Inspect the drive gaskets:*
7. Inspect the control end cover gasket on the drive body and replace, if necessary. If the gasket is in good condition, skip to step 11.
 8. Clean the gasket face on the drive body to remove all gasket material and adhesive. Inspect the cover mating face to ensure no gasket material exists, clean as necessary.
 9. Apply a thin film of gasket adhesive (3M™ Scotch-Weld™ Nitrile High Performance Rubber & Gasket Adhesive 847 or equivalent) to the mating face of the drive body.
 10. Firmly press the new gasket into place and allow time for the adhesive to set before continuing.

Install the new control end:

11. Install the (4) 1/4-28 socket head screws to retain the control end assembly, after applying Loctite® Threadlocker 222™ or equivalent. Torque the screws to 6 lb-ft.
12. Reconnect all wires to the appropriate terminals on the control end terminal board. Refer to the locations recorded in step 3. A wiring diagram is also included with these instructions for reference, see below.
13. Connect power to the drive.
14. Modulate the Demand signal to run the drive through its full range of motion. Verify the correct drive response.
15. Modulate the signal to several intermediate levels and note if the drive attains the proper position.
16. 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.
17. If the drive does not respond correctly, refer to the troubleshooting and calibration sections of Beck Instruction Manual 80-0042-00.

GROUP 42 CONTROL END REPLACEMENT KITS

12-8064-40 (Option 3)

Part Number	Description
23-2142-03	Option 3 Control End Assembly
10-8080-02	Control End Gasket
71-0004-40	Replacement Instructions

12-8064-41 (Option 5)

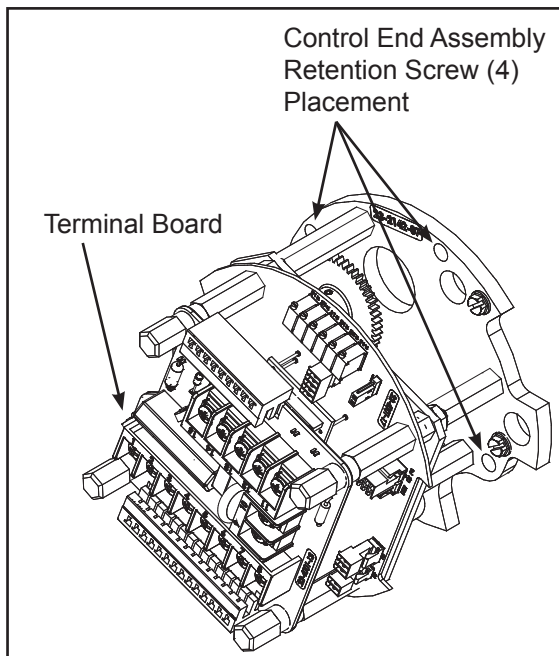
Part Number	Description
23-2142-05	Option 5 Control End Assembly
10-8080-02	Control End Gasket
71-0004-40	Replacement Instructions

12-8064-42 (Option 7)

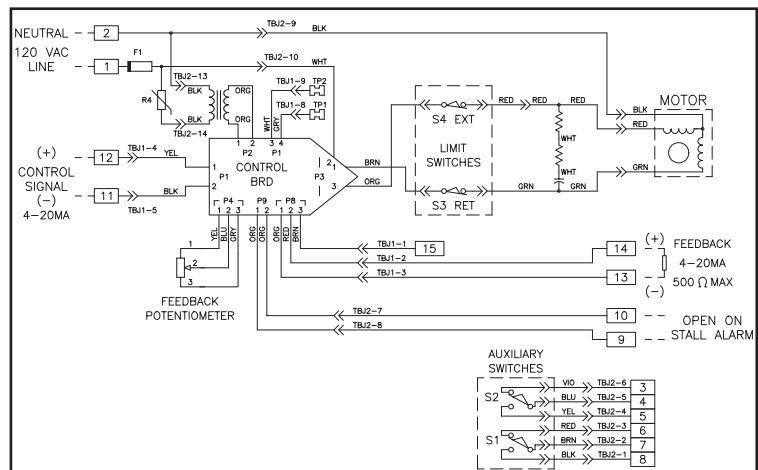
Part Number	Description
23-2142-07	Option 7 Control End Assembly
10-8080-02	Control End Gasket
71-0004-40	Replacement Instructions

12-8064-43 (5 Extra Switches)

Part Number	Description
23-2142-30	Control End Assy. w/ 5 Extra Switches
10-8080-02	Control End Gasket
71-0004-40	Replacement Instructions



CONTROL OPTION 7 SHOWN
(other options similar)



CONTROL OPTION 7 WIRING DIAGRAM

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