

MODELS 42-109 42-107 42-105

42-103

REPLACEMENT INSTRUCTIONS

MOTOR CAPACITOR FOR 60 Hz ACTUATORS (MOTOR P/N 20-2703-50) REPLACEMENT KIT P/N 12-8064-10

PURPOSE

The purpose of these instructions is to provide a step-by-step method for replacing the Beck Group 42 motor capacitor. These instructions are only applicable to Beck Group 42 actuators using 60 Hz power.

REQUIRED TOOLS

1/2" and 7/16" socket or wrench
3/16" flat-tipped screwdriver
#1 Phillips head screwdriver
Torque wrenches appropriate for 10 lb-ft and 72 lb-in
Torque screwdriver appropriate for 10 lb-in,
19 lb-in and 5 lb-in
Grounding strap
Scotch™ 847 gasket adhesive or equivalent



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 capacitor:

Refer to Figure 1 for component identification.

- 1. Remove power from the actuator.
- 2. Remove the (4) 1/4-20 hex head screws on the capacitor cover and remove the cover. The capacitor cover is located adjacent to the motor.
- 3. Make certain there is no voltage across the capacitor.
- 4. Record the exact wire connections to the appropriate capacitor terminals.
- 5. Remove the wires from the old capacitor.
- 6. The capacitor is held in the actuator by two brackets on either side. Each bracket is held in

- place by (1) #10-32 slotted head screw. Remove each screw and bracket to remove the capacitor.
- 7. Remove the capacitor.

Install the new capacitor:

- 8. Obtain the new capacitor.
- 9. Slide the capacitor into the cavity and install the (2) brackets. Torque each bracket screw (#10-32 slotted head screw) to 10 lb-in.
- Reinstall the wire connections to the capacitor terminals. Refer to the locations recorded in step 4.

Inspect the cover gasket:

- 11. Inspect the 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 and the cover to remove all gasket material and adhesive. Ensure that the surfaces are 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.
- 14. Firmly press the new gasket into place and allow time for the adhesive to set before continuing.
- 15. Reinstall the capacitor cover and torque the (4) 1/4-20 hex head screws to 72 lb-in.
- 16. If the actuator has been removed from its mounting position, reinstall it.

Test for proper operation:

- 17. Make certain the Handswitch is in the STOP position.
- 18. Restore power to the actuator.
- Apply power and operate the Handswitch to observe the motor and actuator for proper operation.
- 20. Restore the actuator to service.

Table 1: Motor Capacitor (60 Hz) Replacement Kit

Part No.	Description
14-2840-27	Capacitor, 15 µF, 370 V, Metal Can
20-0661-36	Gasket, Motor Capacitor Cover

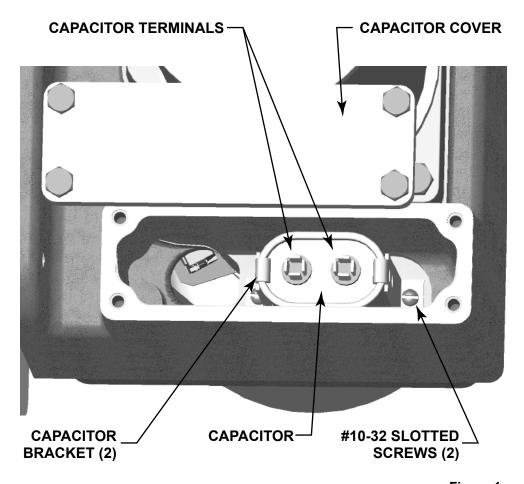


Figure 1