

Replacement Gearmotor Kit for SA1201AT & BA1700 Actuators

AC1017B

Each AC1017B includes:

- 1 Gearmotor Assembly with Coupler
- 1 Capacitor
- 1 Coupler half and Drive pin
- 4 1/4 20 x 5/8" Bolts
- 4 1/4 20 Nuts

- 1 Spider Insert, Rubber
- 1 #8 x 5/8" Tap Screw
- 3 Wire Nuts
- 2 Wire Assemblies
- 3 12" lengths of wire

UNPACKING THE EQUIPMENT

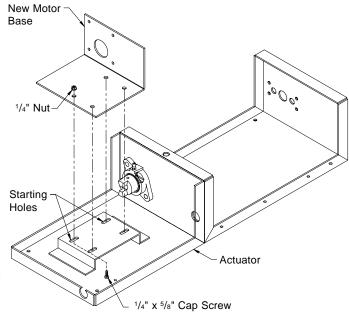
Before beginning installation, check the overall condition of the equipment. Remove packing materials, and examine all components for signs of shipping damage. Any shipping damage is the customer's responsibility and should be reported immediately to the freight carrier.

INSTALLATION INSTRUCTIONS



- 1) Turn OFF main panel breaker to Actuator before replacing gearmotor.
- Remove old gearmotor wires from the relay base. Unbolt and remove old gearmotor from actuator.
- 3) Remove new gearmotor from motor base in kit and save nuts.
- 4) Set new motor base in actuator. Starting with the holes shown, See Figure 1, insert (2) ¹/₄ - 20 x ⁵/₈" bolts (provided) so that the threaded part is visible. Moving clockwise, insert the remaining (2) bolts. Attach ¹/₄ - 20 nut on each bolt. DO NOT TIGHTEN at this time.
- 5) Insert the rubber spider into the motor coupler. Attach motor onto motor base, making sure motor shaft is closest to base, using the (4) nuts removed in Step 3.

If actuator is a BA1700, proceed to Step 7. If it is a SA1201AT, continue with Step 6.



- 6) Using a punch, remove drive pin from ball screw coupler. Slide old coupler off ball screw and discard. Measure from the center of the drive pin hole to the edge of the ball screw. If it exceeds 3/8", cut the difference in length from the ball screw with a high cycle grinder. Attach new coupler using new pin drive.
- 7) Align the motor coupler and ball screw coupler and slide motor base forward so that couplers are tight together. Secure motor base to the actuator by tightening the (4) bolts left loose in Step 4. See Figure 2. If couplers do not fit together tightly, loosen tran torque of motor coupler and slide coupler outward. Repeat Step 7.

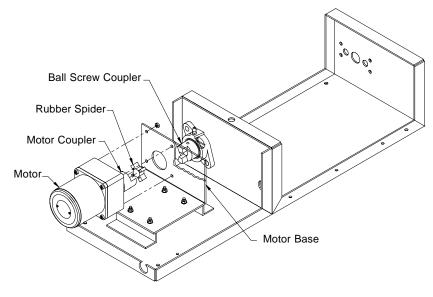


Figure 2

- 8) Move white input wire (neutral input) from terminal 8 to terminal 10 on relay base. Remove existing wires in terminal #3, #5, #6, #7 and #8 from relay base.
- 9) Determine if the three motor leads are long enough to connect to the relay base. If not, attach the three 12" wires to the motor leads with wire nuts provided. **See Table 1.**
- 10) Remove the existing capacitor from actuator. Attach new capacitor with #8 x 5/8" Tapping screw into a hole on the limit switch assembly closest to the relay. Slide terminal of new wire #11 (brown) and #6 (black) onto capacitor. Attach wire #11 to terminal #1 on relay base and wire #6 to terminal #11. **See Figure 3A.**

Motor <u>Leads</u>	New <u>Leads</u>	Relay <u>Base</u>
Blue	Brown	Terminal 1
Gray	Black	Terminal 11
Red	White	Terminal 10

Table 1

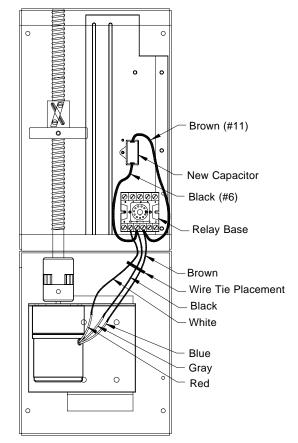


Figure 3A

- 11) Put wire tie on wires between the gearmotor and wire grommet to keep from interfering with cover when installed.
- 12) Test wiring by running actuator in OPEN direction. While opening, activate open limit switch, making sure actuator motor stops. Test the CLOSE direction also. While closing, activate close limit switch, making sure actuator stops. If problem occurs verify correct wiring with Exploded View, *Figure 3B*.

