

“E” Series Electric Actuator

Introduction

Automax 'E' series electric actuators are rotary valve actuators with output torques of 1500 and 3500 in-lbs. Various options are available including a 4-20mA card for modulating.

Maintenance

All ports should be plugged to prevent debris and water from entering unit. Ideally the heater and thermostat option should be used to keep unit dry during storage (if electrical hook-up is available) and operation. Gear train is factory packed for permanent lubrication. There is no need to change the grease, however, should it become necessary to refill, use a multi-purpose grease such as Du Bois MPG-2.

Installation

Installation instructions apply to on-off units. See IOM B00012 for instructions on modulating units.

1. Manually open and close valve to insure freeness of operation.
2. Be sure valve and actuator rotate in the same direction and are in the same position (i.e., valve closed/actuator closed). If not sure, electrically operate the actuator to determine its operating range. The actuators are factory set and calibrated for 90° operation; standard.
3. Mount actuator to valve with preferred Automax AutoBrakit kit to assure proper alignment. DO NOT use the manual override to align actuator shaft to valve shaft, as this could drive the actuator out of its operating range. Note: The keyway supplied with the actuator for adaptation is attached to the output shaft. Some valves have manual stops; remove if appropriate or set actuator to operate within the travel stop range.
4. Care should be taken to properly align valve stem and Automax actuator output shaft. Misalignment will cause premature failure of assembly. Tighten all mounting hardware to prevent damage or injury prior to operating assembly for testing or use.
5. To connect power to terminal strip of actuator you must first remove the actuator cover. Locate schematic for proper terminal wiring.
6. Connect power to terminal strip according to schematic diagram. Power should be fused with a 5-amp slow-blow fuse. The actuator should be wired and grounded per local codes.
7. Before replacing cover, actuate valve and check to see if it opens and closes to preferred positions. If valve does not, adjust cams to properly set actuator travel.
8. Drive actuator to the desired open position. The cams are adjusted in two ways. Simply depress the splined "Quick-Set" cam against the spring and rotate to desired location. Or, for very precise applications, turn the screw inside the cam to move the leaf into the micro switch.
9. To adjust close position, repeat step 8 with actuator in the desired closed position.
10. Switch/Cam adjustment may be "fine-tuned" by loosening switch bracket and moving switch assembly in or out as necessary.
11. Operate the unit several times and ensure operation. If unit is still out of adjustment, reset cams and repeat from 8 until desired results are reached.
12. Replace gasket and secure lid.

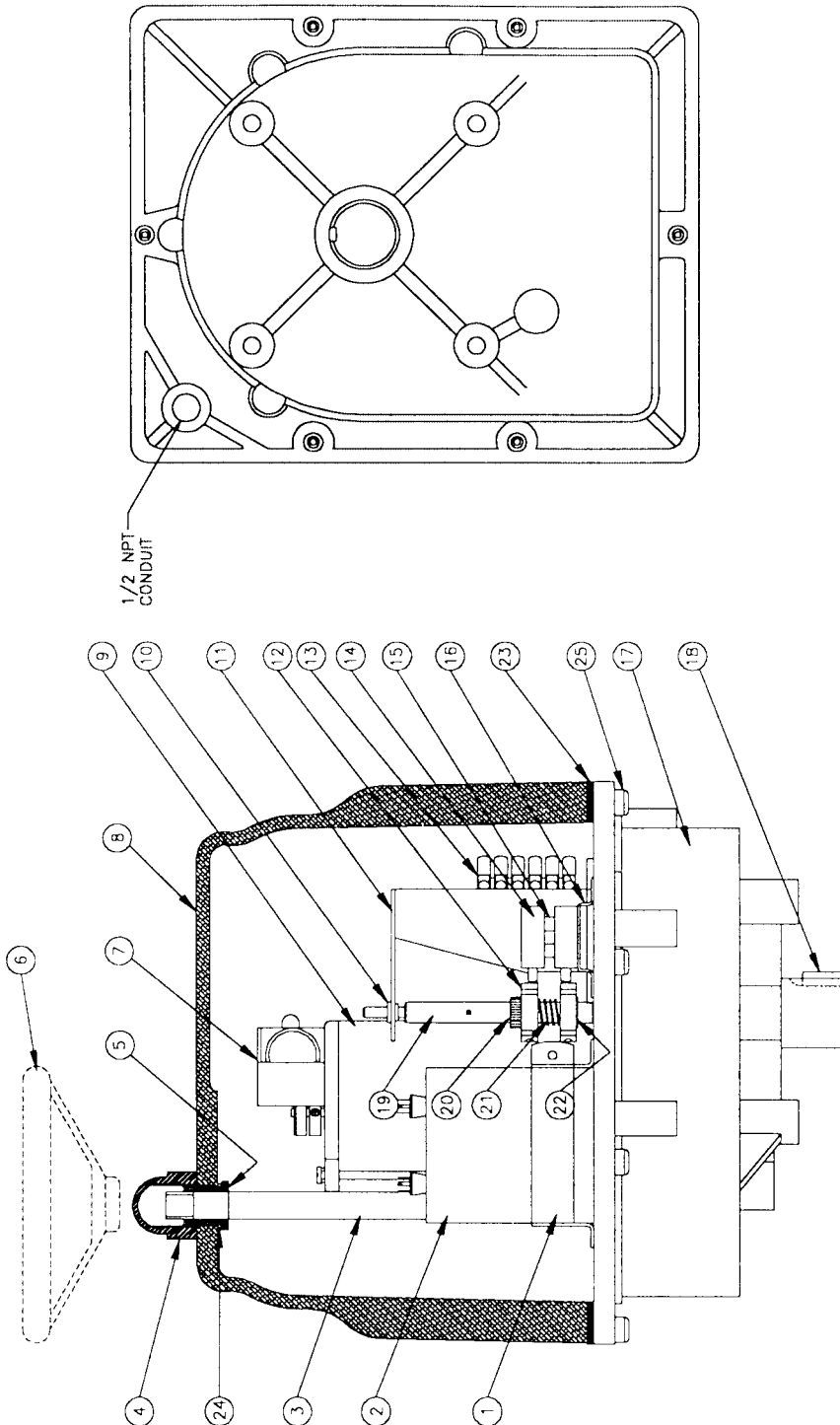
Caution: Actuator cover should be securely attached before operating manual override. Disconnect power, remove nut (if applicable) and rotate shaft/hand wheel slowly. DO NOT FORCE. If unit jams or binds, rotate the manual override in the opposite direction. Rotate manual override clockwise to turn output shaft clockwise as viewed from the top of the actuator.

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Parts & Materials



No. DESCRIPTION	QTY.	PART No.	No. DESCRIPTION	QTY.	PART No.
1. Capacitor Brkt.	1	100036	14. Switch	2	107765
2. Capacitor	1	100045	15. Spacer	2	105679
3. Manual Override Shaft	1	100038	16. Switch Brkt.	1	100034
4. Cap Manual Override	1	100155	17. Gear Motor Assy E1500	1	100047
5. Bushing	1	100037	Gear Motor Assy E3500	1	100046
6. Handwheel Kit (OPTIONAL)	1	106646	18. 1/4 x 3/4 Key	1	100612
7. Brake Assembly Kit	1	107694	19. Cam Shaft	1	108345
8. Cover (Aluminum/Painted)	1	100051	20. Large 4' Spline	1	103571
9. 115VAC Motor	1	100619	21. Limit Switch Spring	1	103714
10. Plastic Bearing	1	105851	22. Small 4' Spline	1	103572
11. Pot & ESP Brkt.	1	108346	23. Gasket	1	100030
12. HI Ramp Cam	2	107622	24. Manual Override Seal	1	100034
13. Terminal Block	1	103997	25. 5/16\"/>		