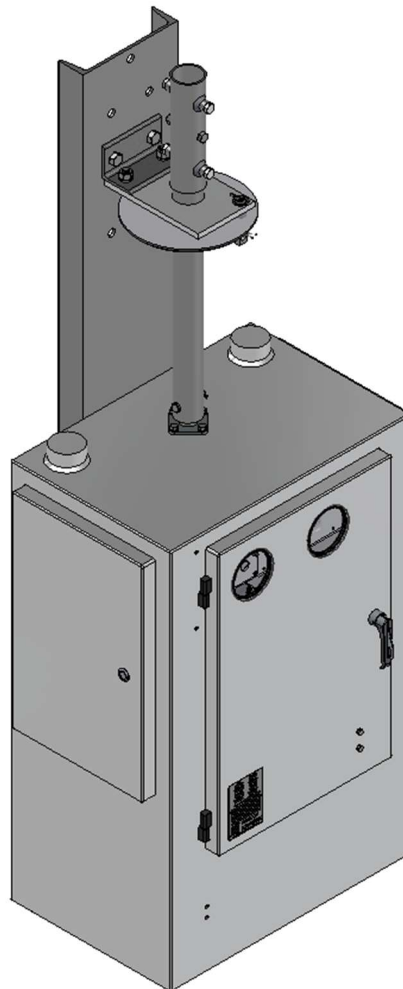


INSTALLATION AND MAINTENANCE

INSTRUCTIONS FOR TYPE MO-10D MOTOR OPERATING MECHANISM



IMPORTANT

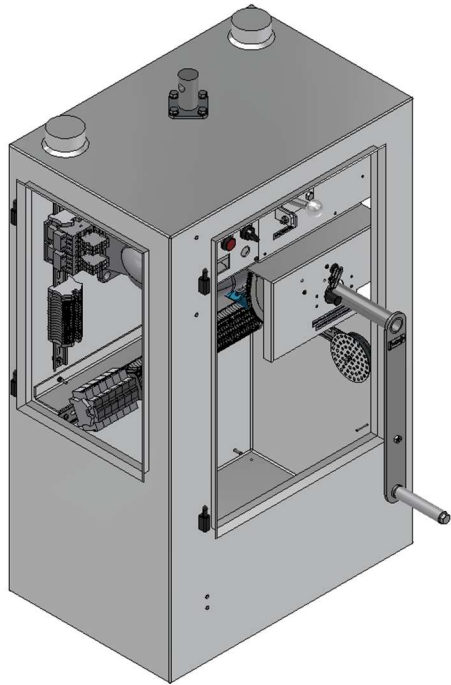
**Read the entire manual before installing and maintaining equipment.
Make absolutely sure that applicable equipment is de-energized and properly grounded.**

GENERAL

The MO-10D motor operator mechanism is a partial revolution mechanism that will operate through 240 degrees and may be used with either a direct-torsional or offset torsional switch operating mechanism.

The MO-10D can be uncoupled from the vertical operating pipe and test operated without disturbing the position of the air-break disconnecting switches. The uncoupled air-break disconnecting switches can be padlocked in either the open or closed position. Unlike a standard motor operator, decoupling in the MO-10D occurs internal to the motor operator cabinet.

For manual operation, insert the operating handle through the opening in the front cover of the housing. As the operating handle is inserted, the motor is electrically disconnected from its control voltage.



PIPE COUPLING INSTALL



Make sure that the switch is not connected to the Motor Operating Mechanism at this point!



Verify the operator output shaft rotation is configured to match the rotation of the vertical operating pipe. Damage to the switch and operator will occur if rotation is not the same.



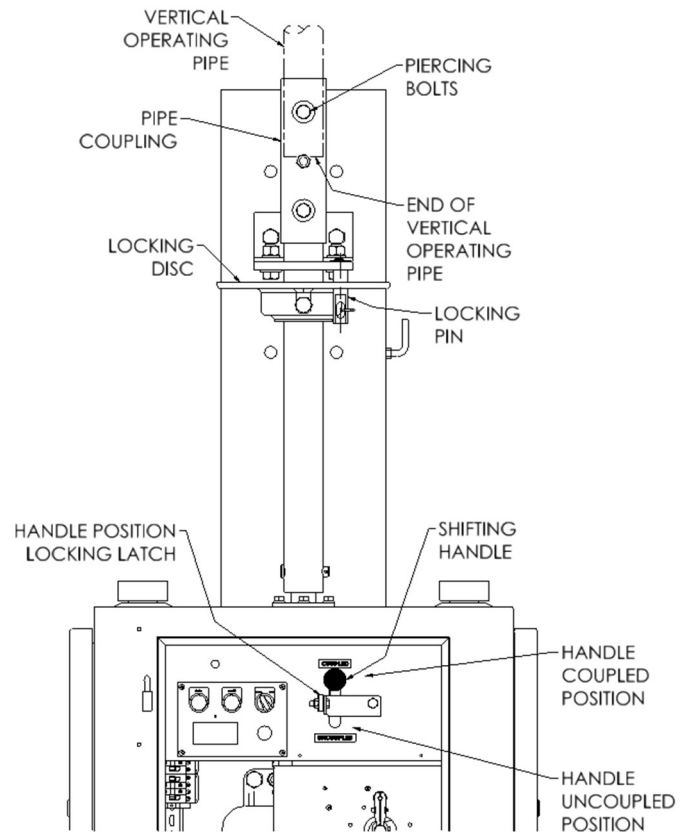
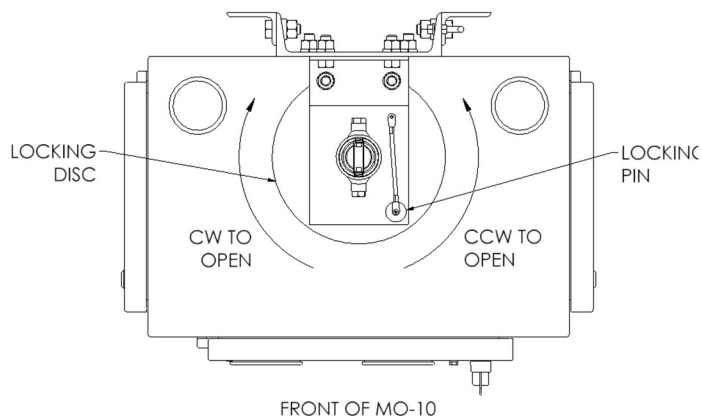
The switch must be adjusted by manually operating before setting the Open & Closed limits on the operator for electrical operation.

INSTALLATION INSTRUCTIONS

- Fully close switch.
- Mount the motor operator using the through holes in the mounting channel and 5/8" hardware. See mounting channel detail drawing for specific mounting hole locations. Install the neoprene backed steel washers between the channel and the structure with the neoprene side towards the motor operator.
- Drill the conduit plate, install conduit and terminate control power wires. Refer to the schematics and wiring diagrams provided inside cabinet.

ADJUSTMENT STEPS

- Set the motor operator in the CLOSED position. If the motor operator is wired for Counter-Clockwise rotation to open, the CLOSED position will typically be on the left and the OPEN on the right facing the motor operator. The opposite would be true for Clockwise to open operation. The "close limit" Auxiliary Switch 2 is to be set with switch closed and as shown on the red instruction decal inside the left door. After the cam has been rotated to the desired position, use the 5/64" Allen wrench to tighten the set screw until it contacts the shaft. **Tighten an additional 1/4 turn for proper torque.**



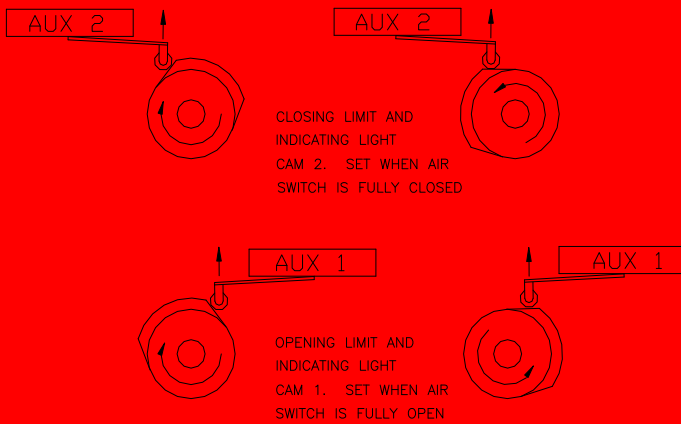
- With the switch and motor operator still in the closed position, move the shifting handle to the coupled position and tighten the piercing bolts. Do not drill the holes for the locking pin in the locking disc at this time since the relative positions of the OPEN and CLOSED position indicators may need to be moved.

NOTICE: IT IS RECOMMENDED TO USE SILICON ON THE BACK OF THE ENCLOSURE WHERE IT MEETS THE STRUCTURE AFTER THE MO-10 HAS BEEN MOUNTED. THE FOUR SEALING WASHERS ATTACHED TO THE MOUNTING BOLTS ON THE BACK OF THE MO-10 SHOULD BE PLACED ON THE BOLT BETWEEN THE STRUCTURE AND THE CABINET PRIOR TO MOUNTING WITH THE NEOPRENE SIDE OF THE WASHER FACING THE CABINET.

INSTRUCTIONS FOR SETTING CAMS

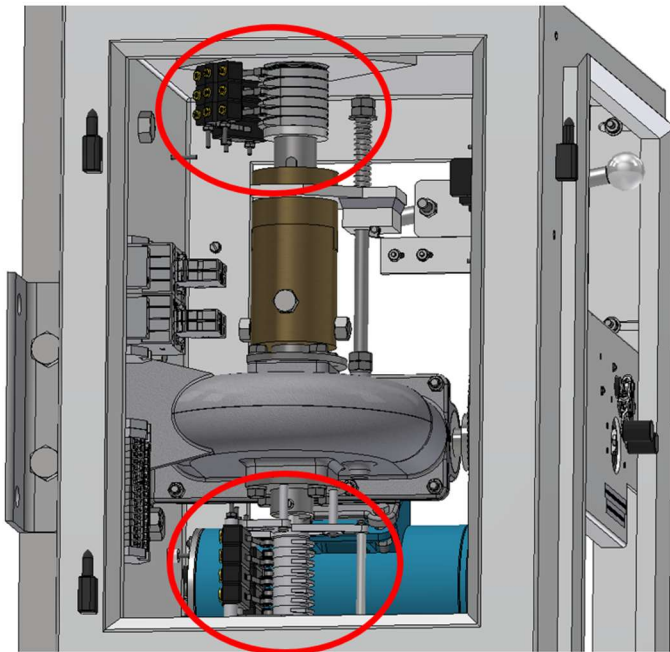
C. W. TO OPEN AIR SWITCH

C. C. W. TO OPEN AIR SWITCH



OPERATE ELECTRICALLY & CORRECT SETTING IF NECESSARY
NOTE: CAM NUMBERING STARTS AT THE BOTTOM OF THE AUX STACK

- After the disconnect switch is properly adjusted, use the manual crank handle and crank the switch to the fully OPEN position. Set the “open limit” Auxiliary Switch 1 according to the red decal.
- Now that the “closed” and “open” auxiliary switches have been set and with the switch still in the OPEN position, drill 7/8” diameter holes in the locking disc that correspond to the open and closed position. Shift the handle down to the uncoupled position to uncouple the vertical operating pipe from the motor operator. Secure the handle in the uncoupled position using the handle position locking latch, and install a bolt or padlock to hold the latch in place.
- Electrically operate the motor operator to the CLOSED and back to the OPEN position. Try to slide the locking pin in the locking disc hole. The pin should slide freely into the hole. If it does not, manually crank the motor operator to where it does slide in freely and reset the “open” Auxiliary Switch 1. Uncouple the VOP and repeat the process until the pin slides in freely without manually cranking the motor operator.
- Couple the VOP to the motor operator and manually crank the switch to the fully CLOSED position. Uncouple the VOP and electrically operate the motor operator and adjust Auxiliary Switch 2 until the pin slides freely into the locking disc hole.
- Couple the motor operator to the VOP and electrically operate the switch to verify appropriate setting of the cams. Reset the limit switches as necessary.
- Once successful switch operation is achieved the remaining auxiliary switches following the motor can be set as required. The auxiliary switches following the disconnect switch may be set at any time after the switch is initially adjusted, independent of the state of the motor operator auxiliary switches.
- Braking of the permanent magnet motor is accomplished through a braking resistor located on the back side of the gear cover panel.



View showing auxiliary switches with individually set cams following the motor operator (bottom) and the disconnect switch (top).

NOTICE 1

Based on our experience, you will obtain best possible operational reliability by following the recommendations given in these instructions. The data contained herein purports solely to describe the product, and it is not a warranty of performance or characteristics. It is with the best interest of our customers in mind that we constantly strive to improve our products and keep them abreast of advances in technology. This may lead to discrepancies between a product and these instructions.

NOTICE 2

Within the scope of these instructions, it is impossible to take into account every event which may arise with technical equipment in service. Please consult our factory in the event of any irregularities, especially if not referred to herein.

NOTICE 3

We expressly decline liability for damages resulting from any incorrect operation or wrong handling of our equipment, even if these instructions contain no specific indication in this respect. We stress the fact that only genuine spare parts should be used for replacement.

NOTICE 4

These instructions do not purport to cover all details or variations in equipment or to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to Pascor Atlantic, 254 Industry Drive, Bland, VA 24315. Phone Number: 276-688-3328, Fax: 276-688-2228 or 2229

www.pascoratlantic.com

DIMENSIONAL LAYOUT

