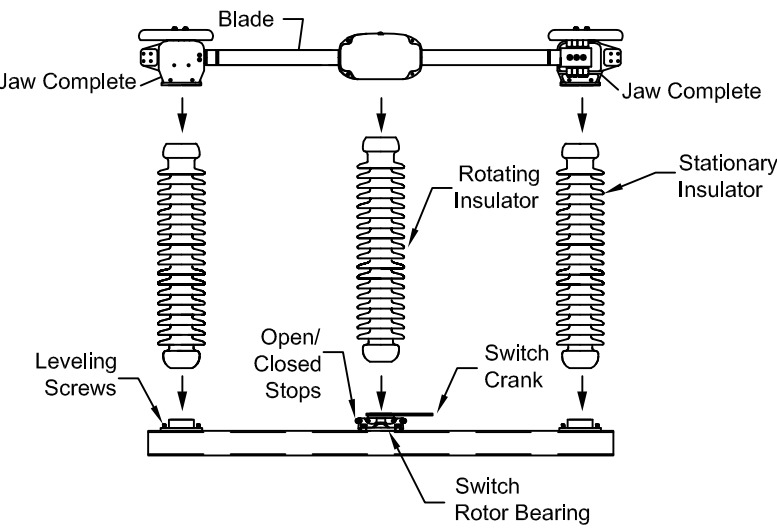


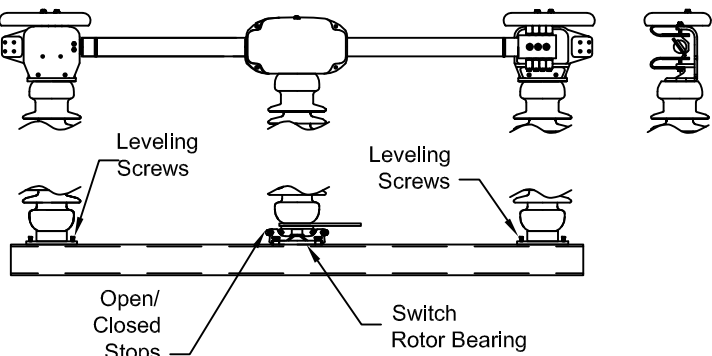
1 Verify Structure is Level and Plum

2 Assemble Single Pole



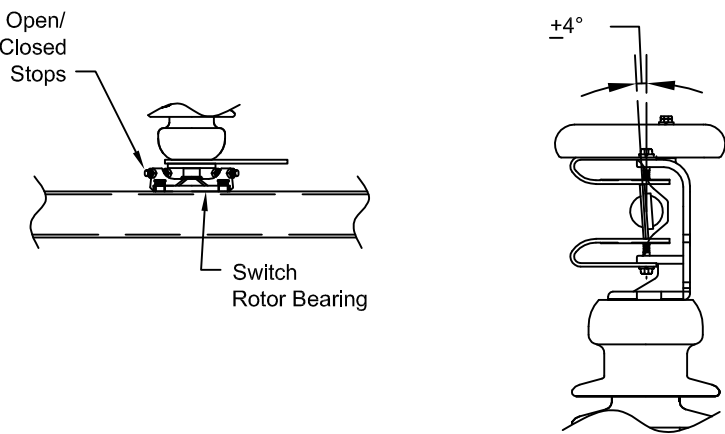
3 Adjust Switch Blade Entry Into Jaw

- Use leveling screw on rotating stack to level blade.
- Use leveling screws on stationary insulators to raise or lower insulator.

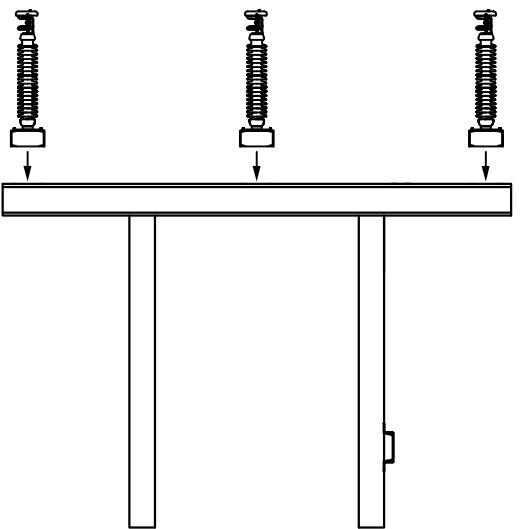


4 Adjust Contact Angle and Engagement

- Blade engagement may vary from 0" to 1" from stop.
- Adjust Engagement using leveling screws.
- Blade angle tolerance is  $\pm 4^\circ$ .
- Adjust stops on rotor bearing to increase or decrease blade roll.

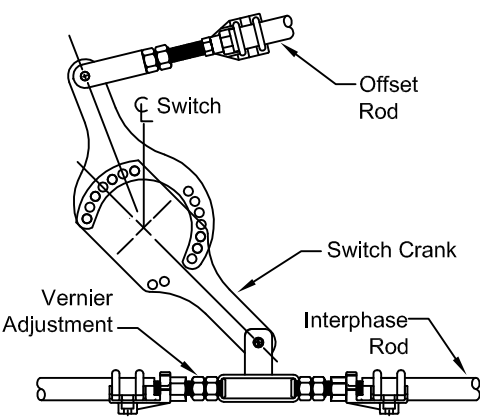


5 Install Single Poles on Structure



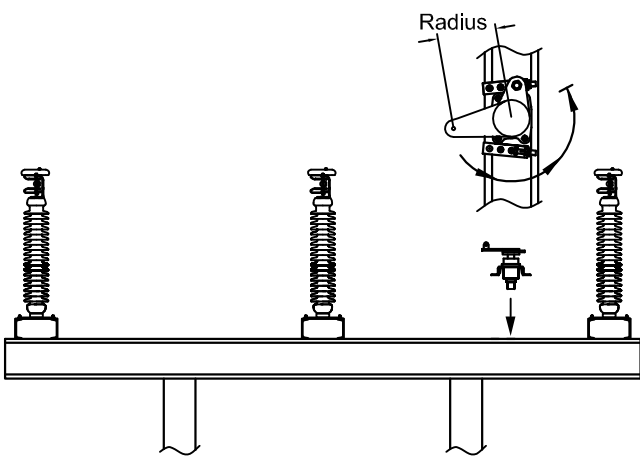
6 Adjust the Multi-Angle Crank

- Refer to installation drawings for correct setting.
- Crank adjustment is located every  $12^\circ$ .



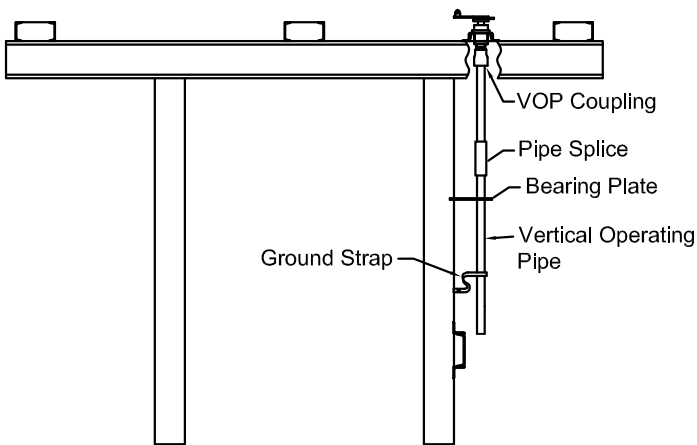
7 Mount Offset Bearing

- Refer to Installation drawings for correct operating crank length radius and angle, and stop crank position



8 Install Vertical Operating Pipe

9 Install Pipe Splice and Guide Plate

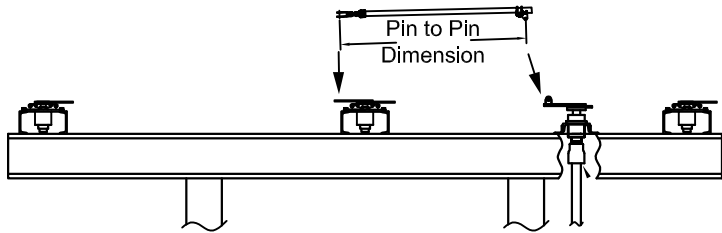


**TTT-7 Double End Break**  
**Basic Installation Guide**

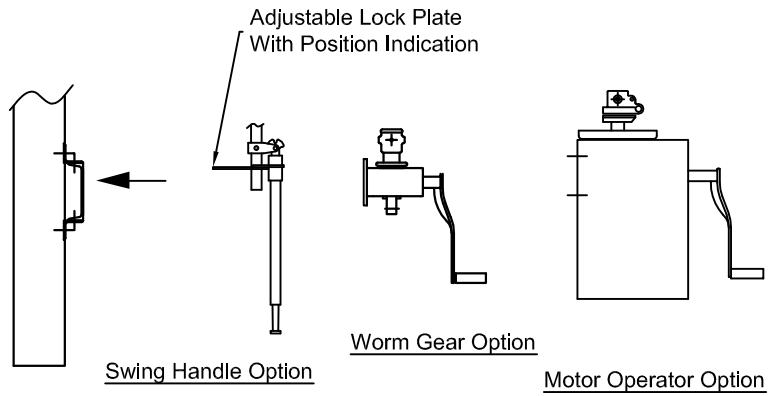
\*\* This manual should be used in conjunction with the factory drawings. To request a set of drawings please have the serial number of the switch and contact the factory at 276-688-3328.

## 10 Install Offset Rod

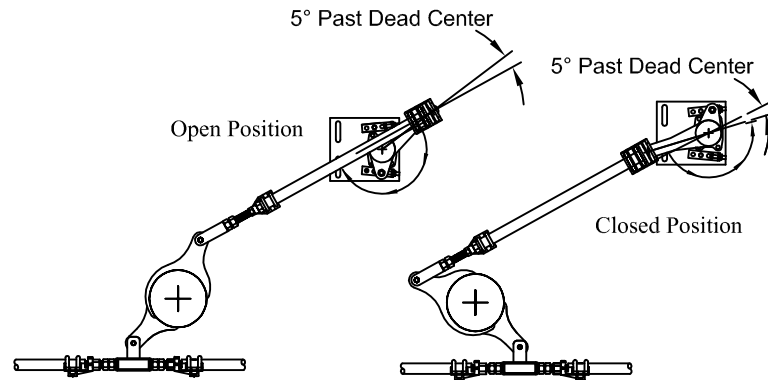
- Pin to pin dimension is located on installation drawing.



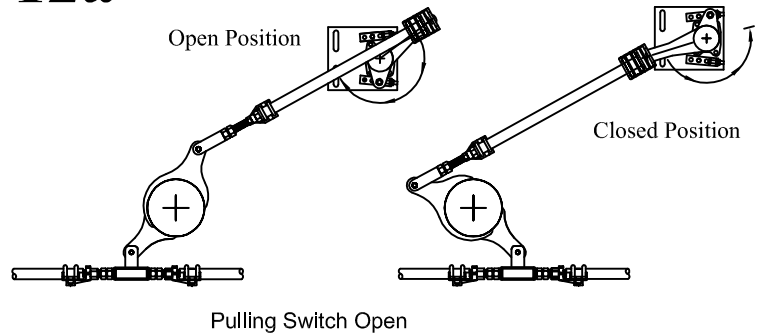
## 11 Install Operator



- ### Dead Center ~ "Toggle"
- Offset bearing crank travel pass dead center.
  - When operating the switch, the offset bearing should "snap" over dead-center in the closed and open positions. This is also referred to as toggle. This serves as a signal to the operator that the switch is either fully open or closed. This also a safety feature that insures the switch is locked either in the open or closed poistion.



## 12a Adjust Drive Phase



### Shortening Offset Rod

- Reduces toggle pressure in closed and addpressure to open position.
- Increase blade opening and decrease blade closing.

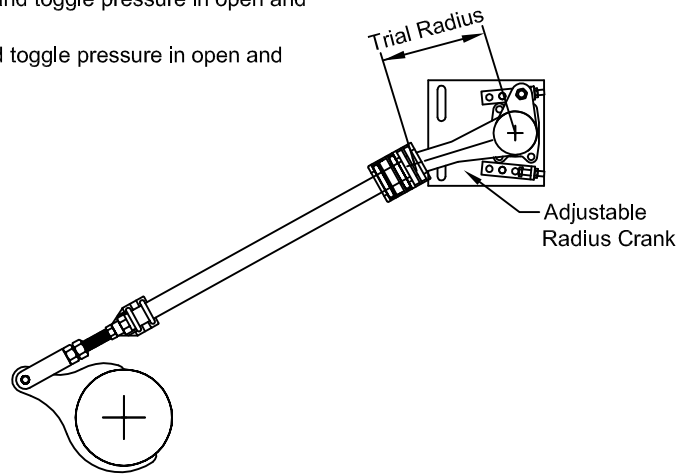
### Lengthening Offset Rod

- Reduces toggle pressure inopen and add pressure toclosed position.
- Increase blade closing and decrease blade opening.

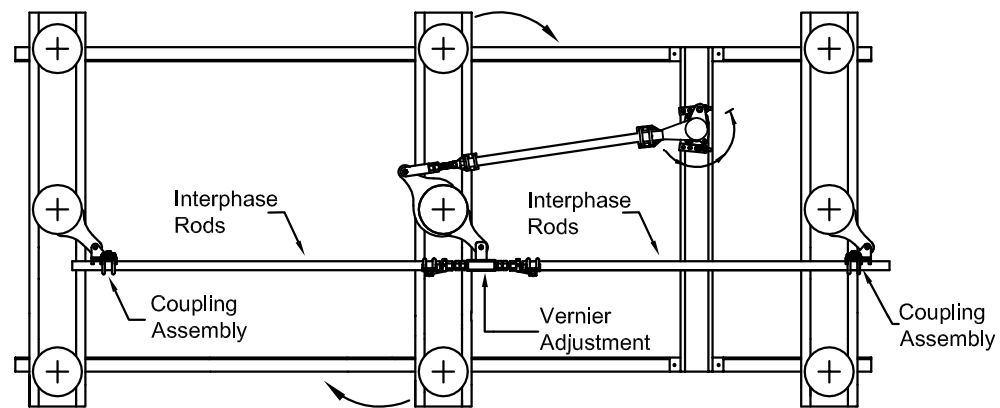
## 12b Adjusting Drive Phase

The adjustable radius crank adjustment increases or decrease throw to the open and closed position.

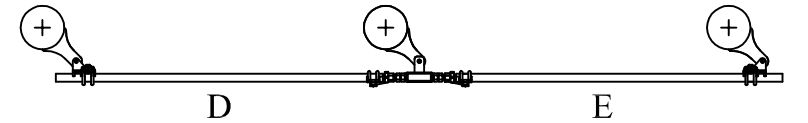
- Lenghening increases travel and toggle pressure in open and closed.
- Shortening reduces travel and toggle pressure in open and closed.



## 13 Install Interphase Linkage



## 14 Adjust Interphase Linkage



### Interphase Pipe "D"

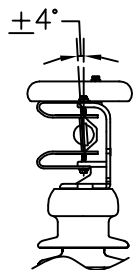
- Shorten will close more and open less.
- Lengthening will open more and close less.

### Interphase Pipe "E"

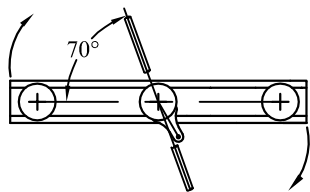
- Shortening will open more and close less.
- Lengthening will close more and open less.

## 15 Final Checks

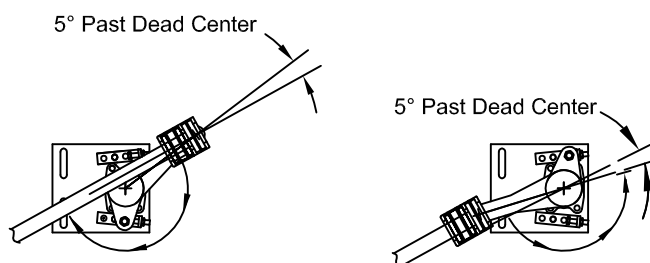
a. Blade Contact Angle is  $\pm 4^\circ$  in Jaw



b. Blades open at  $70^\circ$



c. The offset bearing toggles in the open and close position.



d. All jaw mounting bolts are tightened with switch in close position.

e. Tighten all locking nuts and pierce bolts

f. For worm gears - Position indicators are installed..

