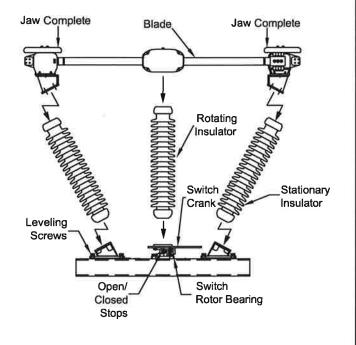
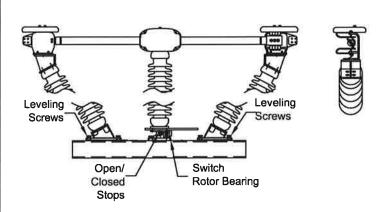
### 1 Verify Structure is Level and Plum

### 2 Assemble Single Pole



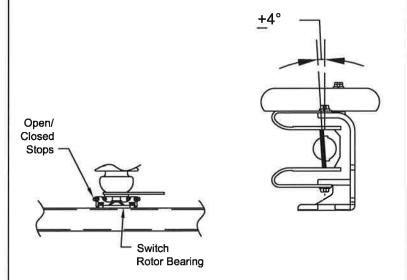
# 3 Adjust Switch Blade Entry Into Jaw

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

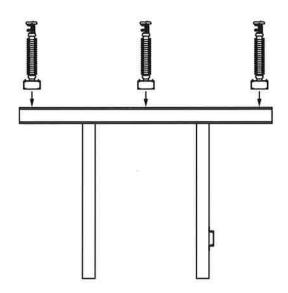


## 4 Adjust Contact Angle and Engagement

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



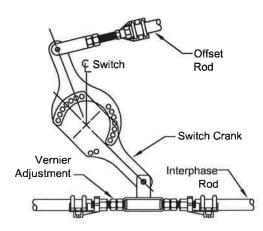
### Install Single Poles on Structure



- Refer to control arrangement drawing supplied with switch.
- Single phase switches are typically mounted on single column.

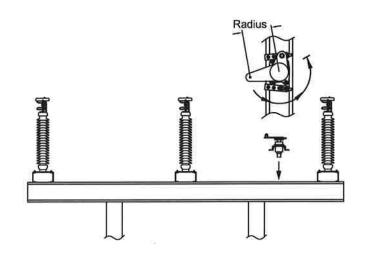
# 6 Adjust the Multi-Angle Crank

- Refer to installation drawings for correct setting.
- Crank adjustment is located every 12°.
- Interphase rods are not utilized for single phase applications.

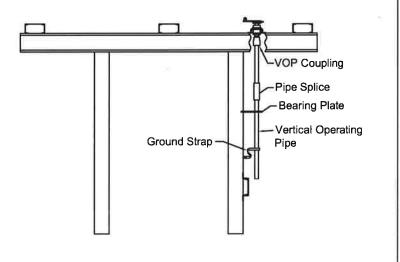


### 7 Mount Offset Bearing

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



Install Pipe Splice and Guide Plate





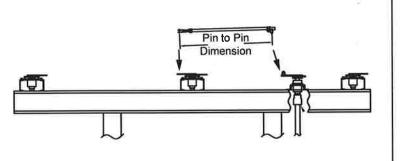
# TTT-7V Double End Break

# **Basic Installation Guide**

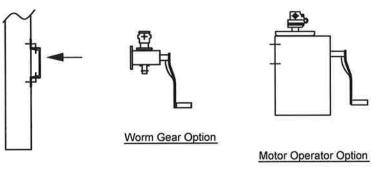
\*\* This manual should be used in conjunction with the factory drawings. To request a set of drawings please have the serial number of the switch and contact the factory at 276-688-3328.

# 10 Install Offset Rod

Pin to pin dimension is located on installation drawing.

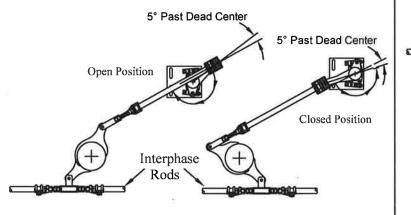


11 Install Operator

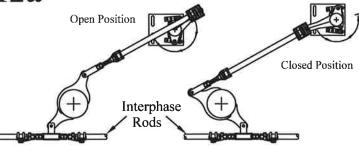


### Dead Center ~ "Toggle"

- 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



Pulling Switch Open

#### Shortening Offset Rod

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

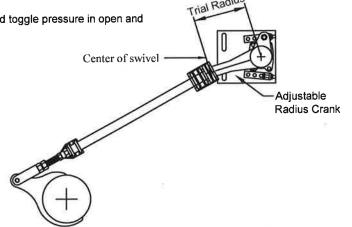
#### Lengthening Offset Rod

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

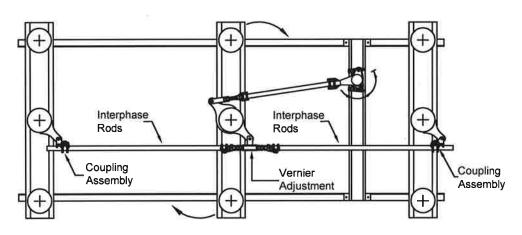
# 12b Adjusting Drive Phase

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.

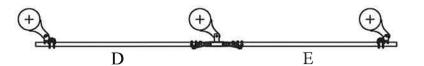


# 13 Install Interphase Linkage



#### Note: Steps 13 and 14 are omitted for single phase operated switches

# 14 Adjust Interphase Linkage



#### Interphase Pipe "D"

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

#### Interphase Pipe "E"

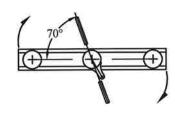
- Shortening will open more and close less.
- Lengthening will close more and open less.

# 15 Final Checks

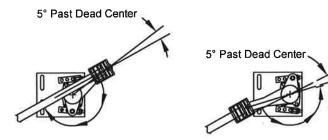
a. Blade Contact Angle is +4° in Jaw



b. Blades open at 70°



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..

