

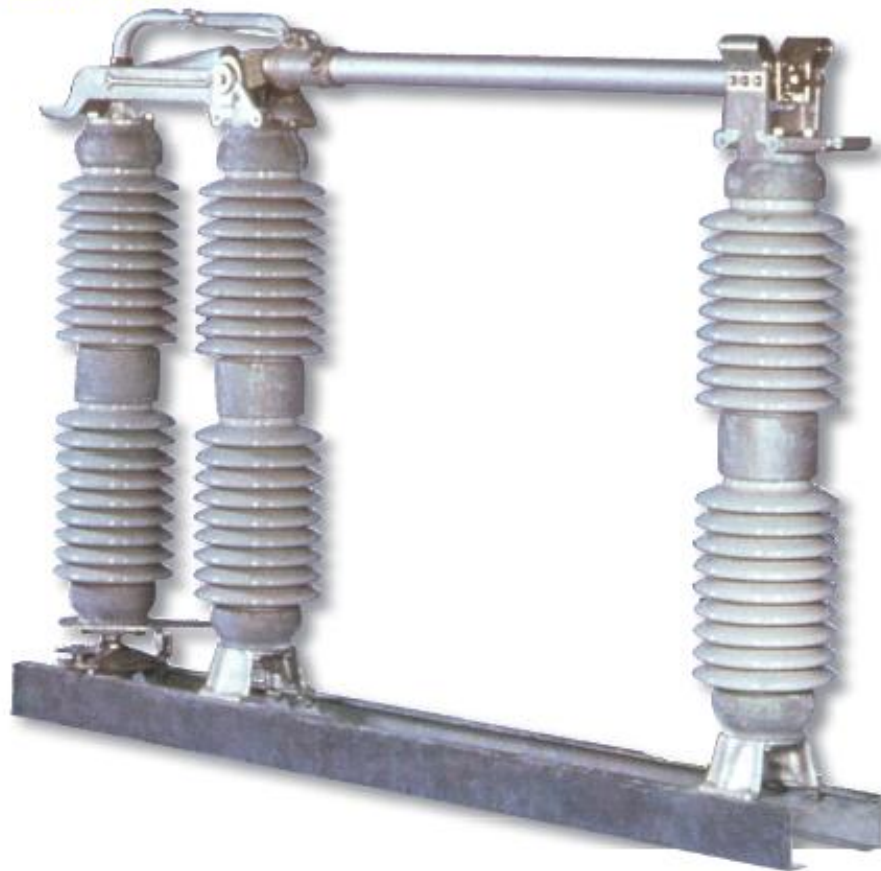
# Type TTR6

8.25 THRU 800 kV  
600-5000A  
40-142 KA MOMENTARY



**PASCOR  
ATLANTIC**

Delivering More. Delivering Service.



*Vertical-Break Outdoor Air Disconnect Switch*

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### Suggested Tools

- 15/16" Open-End Wrench
- 15/16" Socket
- 3/4" Open-End Wrench (2)
- 3/4" Socket
- 1 1/2" Open-End Wrench or Adjustable
- Lineman Pliers
- Tape Measure
- Angle Finder
- Metal Cutting Saw
- Level

**IMPORTANT: Read manual before installing or maintaining equipment! Make absolutely sure that equipment is de-energized and properly grounded.**

This manual should be used in conjunction with the factory drawings. The drawings contain critical information, which if not followed could affect the operation of the switch.

Instructions cannot cover all possible variations in equipment nor provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be required or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the concern should be referred to the factory.

## For Technical Assistance Call 276-688-3328

### RECEIVING INSPECTION

Check the shipment for completeness against the bill of material and installation drawings. If damage is found, file a claim immediately with the transportation company and notify your Pascor Atlantic representative.

### HANDLING

Handling of disconnect switches should be done with care. Porcelain is fragile and may be damaged due to improper handling.

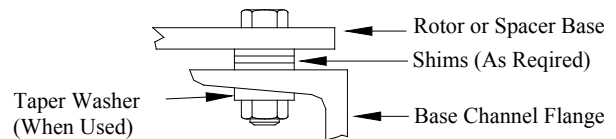
Factory drawings should be followed during installation. It is recommended that switches be fully assembled and adjusted at ground level before being placed into position. This should minimize final adjustments.

Lifting of switches by insulators, contacts, or live parts should be avoided, because of possible damage to these parts. Attachments for hoisting should be made to the switch bases unless otherwise instructed.

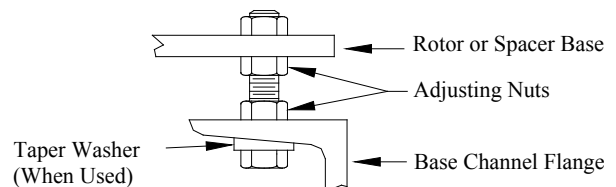
**CAUTION: When uncrating switches having blade counterbalances (Fig. 3), open the switch blade to relieve the pressure of the counter balance before removing the live parts from the base.**

### INSTALLATION AND ADJUSTMENT

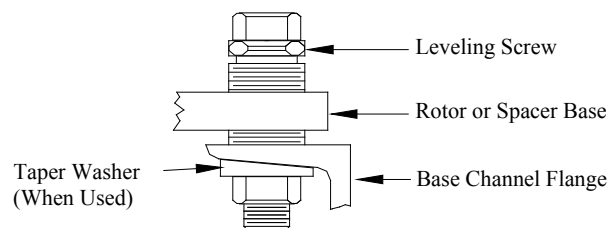
If the switches have already been assembled with insulators at the factory, proceed to step 5. However, it is recommended that each switch pole be checked for alignment and proper adjustment after being mounted on the structure.



Shims Used for Leveling Switches



Leveling Bolts



Leveling Screws

Fig. 1 Types of Leveling Devices

### Step 1—Check Bases

Check bases to make sure that the spacers and rotor bearing tops are square and level. The tops of the two supports on the hinge end must be exactly the same height. If necessary, make adjustments or shim. Shims, leveling screws,

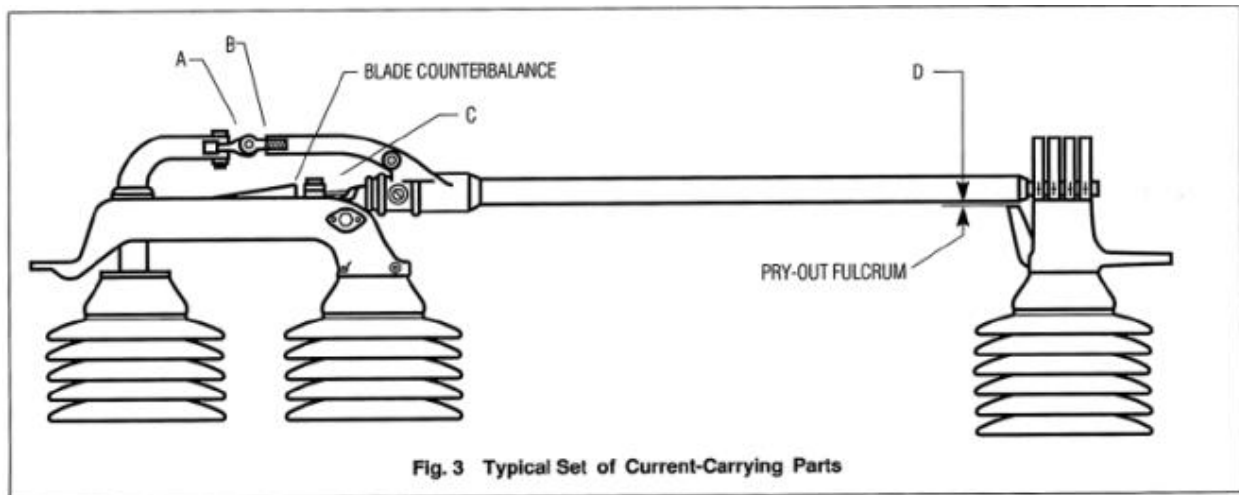


Fig. 3 Typical Set of Current-Carrying Parts

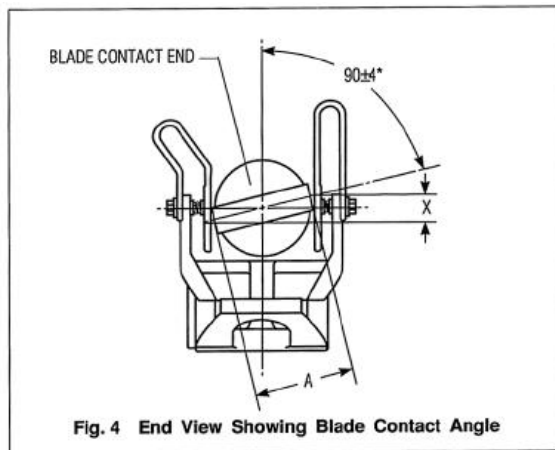


Fig. 4 End View Showing Blade Contact Angle

and adjusting nuts are shown in Fig. 1 and are explained in step 3.

### Step 2—Assemble Insulators

Assemble the insulator stacks to the switch base. Do not disturb the position of the switch crank when mounting the insulator stack to the rotor bearing, as the crank has been properly located at the factory. In some cases, involving higher voltage switches, the installer may choose to mount the switch bases on the structure before assembling the insulators. In such cases the switch bases should be mounted on the supporting structure in the positions shown on the installation drawing. The bases should be level and parallel to each other. Make sure that the base for the drive phase is in the correct location and operating cranks are at their proper angles.

### Step 3—Insulator Stack Alignment

Lower voltage switches 8.25 thru 72.5kV generally do not require insulator stack alignment. Where required, the insulator stacks of switches thru 242kV can be aligned using open-end shims or leveling screws and/or adjusting nuts (Fig. 1) if supplied (optional).

- If using shims, place the shims under the insulator supports (rotor bearing or spacer mounting flange) where the bolts secure the rotor bearing or spacer mounting flange to the switch bases.
- If optional leveling screws and/or adjusting nuts have been supplied, as shown in Fig. 1, adjust the leveling screw and/or adjusting nut to align the insulator stacks. Loosen all hardware before jacking to prevent binding.

### Step 4—Mount Current Carrying Parts

**Caution:** When uncrating switches having blade counter balances (Fig. 3), be careful to keep linkage on dead center until the blade and hinge assembly have been bolted in place on the insulator columns. Otherwise, the counterbalance springs may collapse the hinge end toggle, possibly causing injury to workmen. Make certain that the base crank is in the proper position when mounting current carrying parts, i.e. base crank rotated to the maximum counter clockwise position with the blade closed. Care should be exercised when hoisting the blade hinge and jaw assemblies into position to prevent scratches or damage to these current-carrying parts. When assembling the jaws on the insulator columns, leave the mounting bolts finger tight. This will permit the jaw base to be rotated and shifted slightly for subsequent

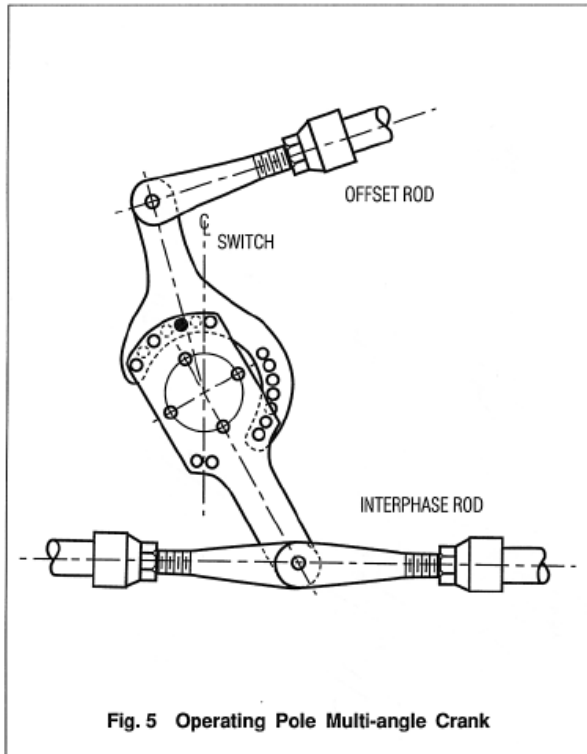


Fig. 5 Operating Pole Multi-angle Crank

contact alignment. This alignment will be discussed later under blade entry (step 6).

#### Step 5—Mount Switches

Assemble the switches on the supporting structure in accordance with the positions shown on the installation drawing. The switches should be mounted level and parallel with each other. In case of a warped structure, shimming under the switch bases may be required.

#### Step 6—Switch Blade Adjustment

When looking down on the switch rotating insulator column, rotation of the column is clockwise to open the switch and counterclockwise to close. First, make sure that stop bolts (Fig. 13) at base of rotating insulators do not prevent switch from traveling to the complete open and closed positions, then check each pole unit for the following items:

**Blade Entry**—Lower the blades slowly to the closed position to see if blade contact enters the jaw in a central position. If it does not, loosen the hinge assembly mounting bolts on stationary insulator stack and with blade just out of the jaw, shift blade into alignment and tighten hinge assembly mounting bolts. Should this fail to

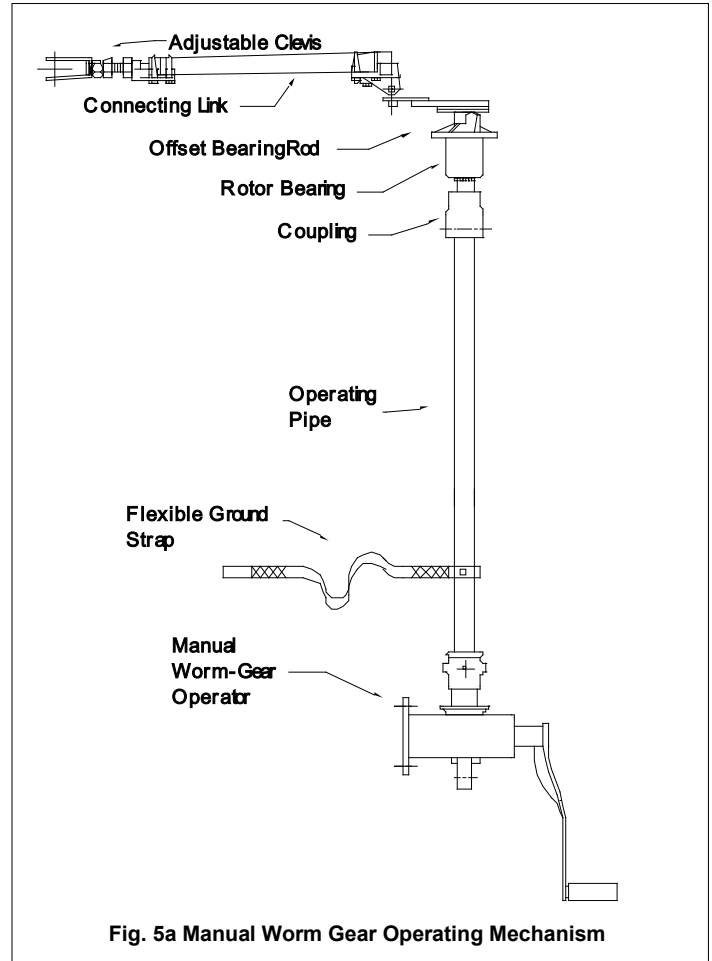
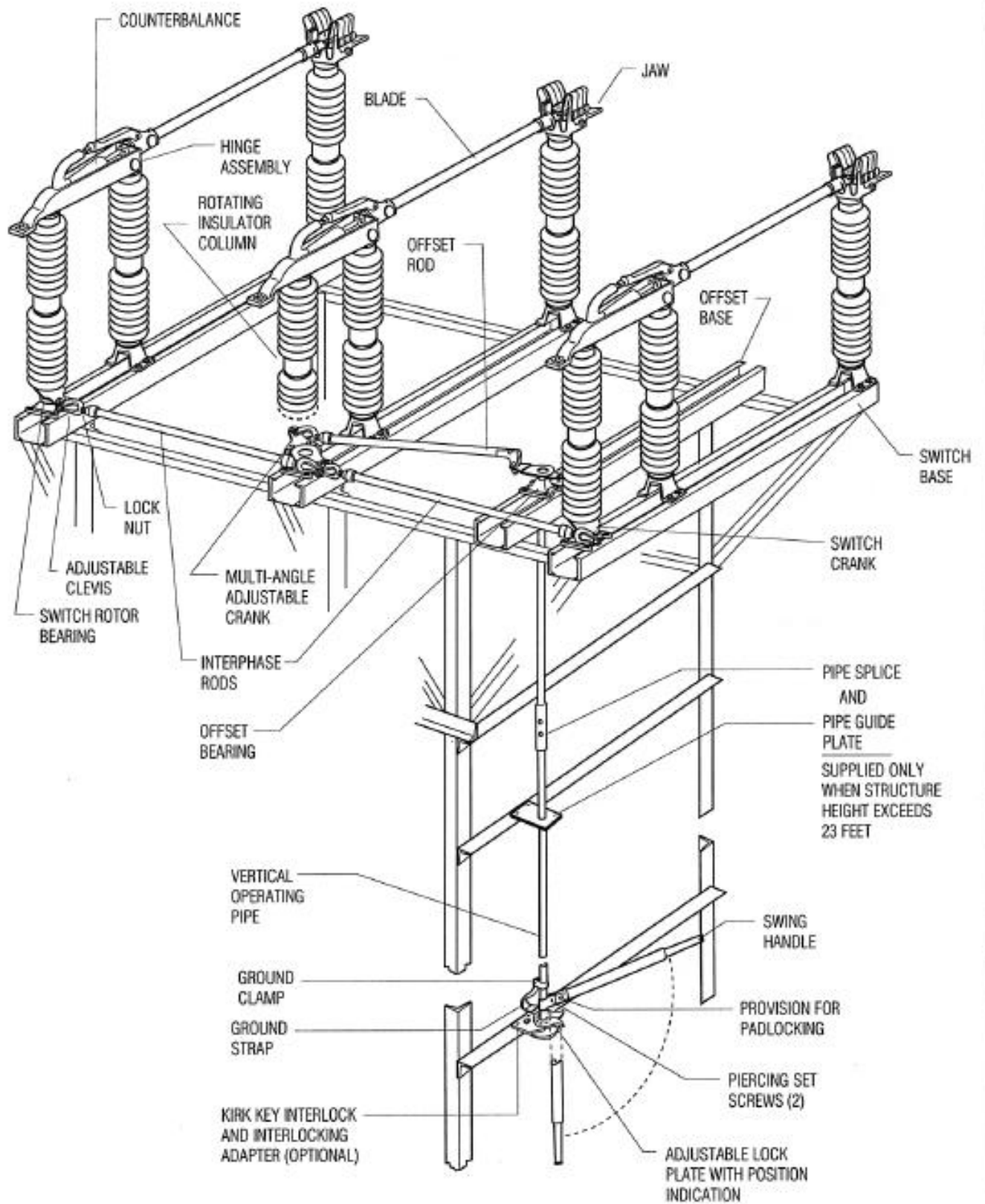


Fig. 5a Manual Worm Gear Operating Mechanism

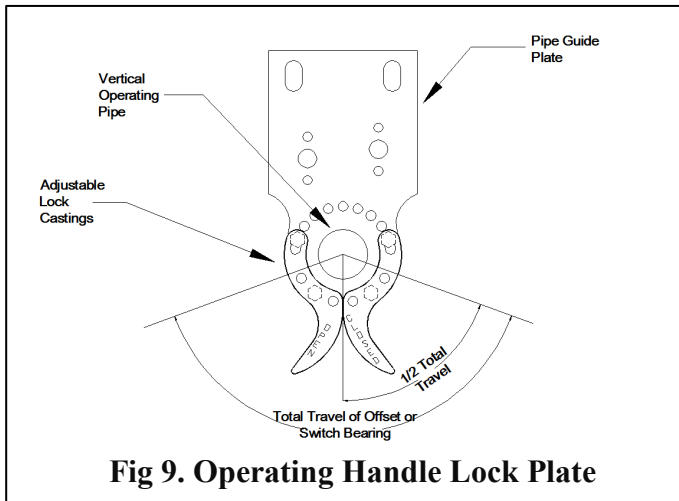
give proper blade entry, the jaw insulator stack should be shimmed or adjusted to suit. When central entry is achieved, rotate the blade into contact and tighten jaw base mounting bolts.

Also make certain the jaw fingers are nearly centered on the blade end contact. If it is expected that the conductors to be attached to the switch jaw will impose an appreciable horizontal force, it is recommended that the jaw insulator column be adjusted so that the jaw fingers are slightly off center on the blade contact, in a direction toward the hinge end. The blade must rotate on opening and closing to relieve the jaw contact pressure

**Blade Contact Angle**—(Fig. 4) The allowable difference in elevation from one side of the blade contact to the other (dimension X) is  $1/16''$  for each 1'' of contact width. Example: If contact width (A) is  $4\ 1/2''$ , then dimension (X) can be as much as  $9/32''$  and still be within the plus or minus 4 degree tolerance.



**Fig. 6 Typical Three-pole TTR6 Switch Installation.**



Also, Fig. 4 shows blade contact high on the right and low on the left. The reverse is also acceptable, high on the left and low on the right. It is common to have both situations on one three-pole switch. In fact, after all three poles have been adjusted in the open position, and then closed, you may find that one pole will be high on the right, one fairly level and one high on the left. This is

due to many variables and tolerances plus the free play or clearance in pin connections of all the switches and control parts.

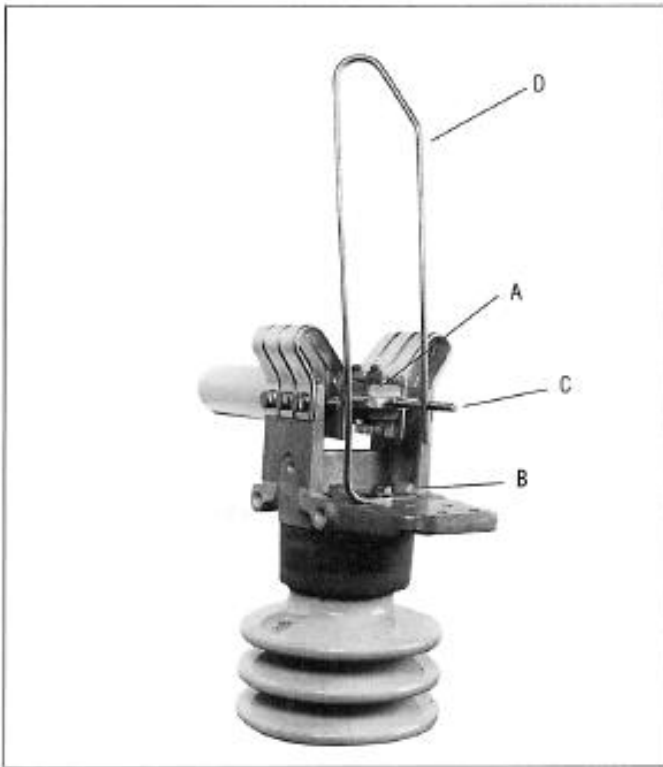
Variance in contact angle is not significant because no reduction in contact pressure occurs until the blade exceeds  $\pm 8^\circ$  above the horizontal.

**Blade Height in Jaw**—In Fig. 3, dimension (D) can vary from 0" to 5/8" with the switch in the closed position. It is not usually possible to get this dimension to be equal on all three poles of a three-pole switch. If it's necessary to adjust this dimension, remove connecting pin (A) and turn clevis (B) in or out 1/2 turn then reconnect and try switch. Turning the clevis in will move the blade away from the blade stop. Conversely, turning the clevis out will move the blade closer to the blade stop.

**Open Blade Stop**— On switches, there are stops for the blade in the open position, as shown at (C), Fig. 3. Some of these stops have flat washers that can be relocated to raise or lower this stop, while the voltage rated switches use treaded bolts with lock nuts. In either case,



raising the stop surface (C) will reduce blade opening angle; lowering the stop surface (C) will increase the blade opening angle. After each pole has been adjusted, set the open and closed stop bolts of each rotating insulator.



**Fig. 10 Arcing Horns 8.25 kV thru 169 kV**

**Step 7—Mount Offset Bearing**

For those installations requiring an offset bearing, mount the offset bearing and its supporting base on the structure in the position shown on the installation drawing. Fig. 6 shows a typical arrangement using the offset bearing. Check operating crank for proper length radius and angle, and stop crank for correct position. If the offset bearing has an adjustable crank, it is sometime necessary to add 1/4" to 1/2" to the trial radius given on the control drawing to get required travel to switch blades. This additional length allows for lost motion and clearances in pin holes and will also provide a definite audible sound accompanied by a reasonable amount of deflection in the structural members when the crank crosses the dead center position. This serves as a signal to the operator that the switch is either fully open or closed.

**Step 8—Adjust the Multi-Angle Crank**

The crank is identified in Fig. 5. This crank is supplied on the operating pole unit connected to the offset bearing.

3" Bolt Circle Insulators have a multi-angle crank that permits 333 degrees of angular adjustment with a crank location every 9 degrees, which results in adjustments to within 4-1/2 degrees of desired position.

5" Bolt Circle Insulators have a multi-angle crank that permits 336 degrees of angular adjustment with a crank location every 12 degrees which results in adjustments to within 6 degrees of the desired position.

In some adjustments, the multi-angle crank may be in such a position as to interfere with the stop projection on the switch crank. If this is the case, then remove this projection. The other two poles will regulate the blade travel on this unit.

*Note: The multi-angle crank should be set so that it forms an angle of approximately 45 degrees with the offset link in either switch position, open or closed.*

**Step 9—Install Interphase and Offset Crank Rods**

With all blades in the closed position, install the interphase rods and offset crank rod as follows:

- a. Lengthen the interphase rods that are in compression during opening, as much as possible, yet allowing for the pins to be inserted.
- b. On the rods that are in tension during opening, shorten them as much as possible, yet allowing for the pins to be inserted.
- c. The offset crank rod between the outboard bearing and the driven switch should be handled the same way
- d. For lubrication of pins and bearing areas, see Table 2

**Step 10—Install Vertical Operating Pipe**

Attach vertical operating pipe to rotor bearing shaft, or to offset rotor bearing shaft with supplied coupling pins, see Fig. 5A. At this point, check drawings for accessory equipment (auxiliary switches, mechanical interlocks, position indicators, ground straps, etc.) which mounts on vertical operating pipe and install before continuing installation. The vertical pipe is predrilled at one end for a 5/8" diameter pin, two of which are shipped, together with a coupling, in a bag, for connection to the offset bearing shaft (or on the pole unit rotor bearing in the case of direct connection switches)



### **Step 11—Install Pipe Splice and Guide Plate**

When the structure height exceeds 23 feet, a pipe splice and a guide plate are furnished and should be installed as shown in Fig. 6. The pipe splice and both pieces of pipe are predrilled to receive the 5/8" diameter pins. The guide plate should not be solidly mounted until after the vertical pipe has been completely installed. Then bolts holding the guide plate on the structure should be tightened in order that the holes in the guide plate line up with the normal position of pipe. This assures that there is no binding.

### **Step 12—Install Operating Mechanism**

Either a swing handle or a worm gear mechanism is (normally) supplied for manual switch operation.

#### **Swing Handle Operator**

To install the swing handle operator:

With ground strap in place on vertical operating pipe, slide handle and handle lock plate over the end of the vertical operating pipe. Fasten the lock plate at the proper location. Recommended height for the lock plate is 3 ft. 6 in. above ground.

*Note: The lower end of the vertical operating pipe should extend through the lock plate at least 3 inches. It may extend as much as 3 feet or more, just so it doesn't touch the ground or column footing.*

The lock plate assembly consists of two castings, mounted on the pipe guide plate, which can be easily adjusted in an arc to provide the required rotation. These act as locks for the manual operating handle when it is dropped from the operating position. The handle must be raised to a horizontal position for operation. With the switch in the fully closed position, set the handle clamp so its set screws are 4 inches above the lock plate and its vertical centerline is at or near as possible to the closed position.

Temporarily fasten the handle to the pipe with the set screws. Operate the switch and move the adjustable lock castings until they exert pressure against the handle in both the open and closed positions of the switch. This provides a slight torsional wind-up in the operating pipe. Tighten

the two piercing set screws on the handle clamp until holes are punched into the pipe and continue until the screws are firmly seated.

#### **Worm Gear Mechanism**

With ground strap in place on vertical operating pipe, slide worm gear mechanism (Fig. 8) over the vertical operating pipe and attach it to the structure. Remove the small position indicators, which are attached to the worm gear coupling with Allen set screws. Tighten hex head set screws in the coupling until the vertical operating pipe is pierced. The three-pole switch should now be operated manually to check for proper adjustment. If all stops at switch elevation have been set, including the offset bearing, then it is safe to reinstall the position indicators on the worm gear mechanism. These indicators should not quite touch the raised boss on the worm gear housing in either the open or closed position. There is a possibility of damage to the indicators or the coupling if this is not observed.

#### **Motor Operator**

For remote operation, a motor operator is supplied and it should be installed per the instructions supplied with it.

### **Step 13—Arcing Horn Installation (When Supplied)**

When arcing horns are used on switches, they should be installed and adjusted after mounting the switches on the structure. Arcing horns are furnished only when horn gap switches are ordered. Fig. 10 shows arcing horns used on switches 8.25 thru 169 kV. The movable strait horn (C) is assembled by screwing it into the blade end. Tighten the locking nut seat securely against the end of the blade (A). The stationary horn is positioned properly on the jaw with the saddle clamp, and bolted (B). This stationary horn should be adjusted or even bent slightly to give light contact pressure between the two horns over the entire length if the movable horn.

Arcing horns for 242 kV switches are essentially the same as Fig 10 with the stationary horn contacting the movable horn at the surface between the end of the blade and small corona ball which is affixed at the end of the movable horn.

Arcing horns for switches 362 thru 8000kV do not use a movable horn. Instead the stationary

horn makes contact with the rear surface (corona-protected surface) of the corona ball.

*Note: Always check switch operation mechanism drawing for type of arcing horns supplied.*

**Step 14—Installation of Corona Rings and Balls**

Corona rings and balls, when supplied, should be installed as shown on the single-pole drawings. Prepare areas where ring supports contact switch parts per instructions for aluminum connections at right.

1. 169 kV switches and below do not require corona rings or ball.
2. 242 kV switches use corona rings at the jaw end and a small ball on each end of the blade.
3. 362 kV switches and above use rings at both ends and a large ball on the end of the blade.

After these are installed, the switches should now be ready for service.

**Step 15—Final Checks**

The completed 3-pole installation should be checked for the following:

1. In the open position, the blades should stand essentially vertical.
2. In closing, blades should make central entry into their jaws at approximately the same time.
3. In the closed position, all blades must be in full contact and horizontal within tolerances.
4. In opening, the blades should rotate to relieve the jaw contact pressure. (If the blade remains flat, the blade beaver tail will engage the stops formed on the jaw fingers and further operating effort can result in mechanical damage.) Recheck base crank orientation per step 4.

**Terminal Connections**

The aluminum surface of the terminal connection provides for easy current transfer.

*Note: In cases where a copper conductor is used, bolt a tinned terminal clamp (if available) to the aluminum switch terminal pad.*

*If a non-tinned terminal clamp is used, apply a liberal amount of electrical joint grease at the joint and all over the pad of the fitting.*

**To connect aluminum-to-aluminum terminals:**

1. Clean all contact surfaces of conductors and fittings using a stiff wire brush to remove heavy oxide coatings until the aluminum finish is visible and restored.
2. Coat these now clean contact areas with a liberal amount of corrosion inhibitor such as NO-OX-ID™ “A Special” or No. 2 EJC.
3. Abrade the contact surface through the corrosion inhibitor again using the stiff wire brush.

*Notice: Do not remove the compound.*

4. Connect the terminals and torque the bolts as per Table 1.

**To connect copper-to-aluminum terminals:**

1. Except for plated surfaces, clean all contact surfaces of conductors and fittings using a stiff wire brush to remove heavy oxide coatings until the aluminum finish is visible and restored.
2. Prepare any bare copper surfaces in the usual manner.
3. Coat these now clean contact areas with a liberal amount of corrosion inhibitor such as NO-OX-ID™ “A Special” or no. 2 EJC.
4. Abrade the contact surface through the corrosion inhibitor using a stiff wire brush.

*Notice: Do not remove the electrical joint grease.*

5. Connect the terminals and torque the bolts as per Table 1.

BOLT SIZE	condition of Threads	Recommended torque in Ft. Lbs.			
		Silicon Bronze	Aluminum 2024-t4 anodized	Stainless Steel Type 304	Bright Zinc, Black & Galv. Steel
3/8"-16	Dry	20	15	16	12
	Lubricated	15	12	13	10
1/2"-13	Dry	40	35	40	30
	Lubricated	30	20	30	20
5/8"-11	Dry	70	60	70	50
	Lubricated	50	40	50	40
3/4"-10	Dry	100	95	100	90
	Lubricated	85	60	80	70
7/8"-9	Dry	150	130	140	130
	Lubricated	120	75	110	100
1"-8	Dry	200	160	170	170
	Lubricated	160	95	140	130

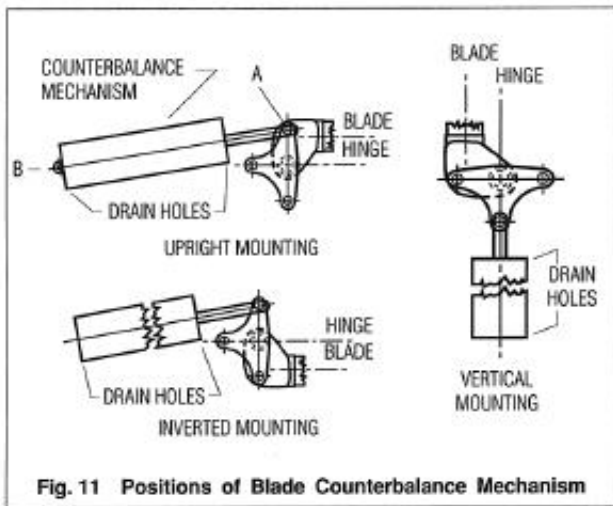


Fig. 11 Positions of Blade Counterbalance Mechanism

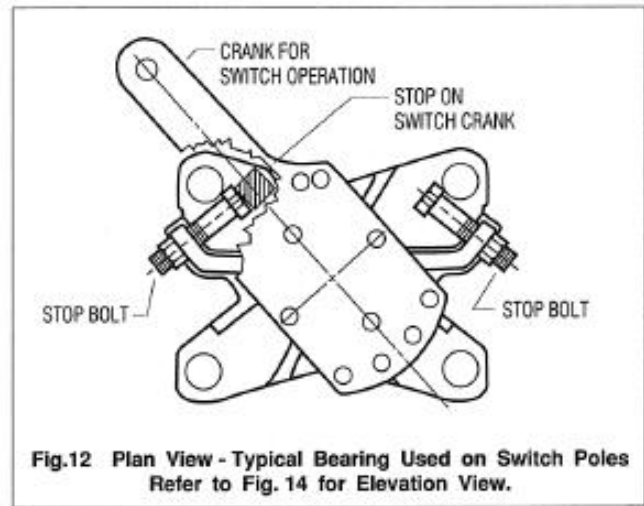


Fig. 12 Plan View - Typical Bearing Used on Switch Poles Refer to Fig. 14 for Elevation View.

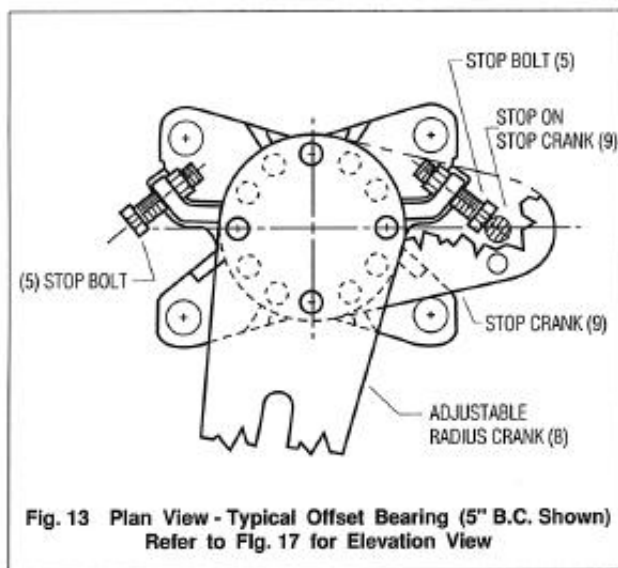


Fig. 13 Plan View - Typical Offset Bearing (5" B.C. Shown) Refer to Fig. 17 for Elevation View

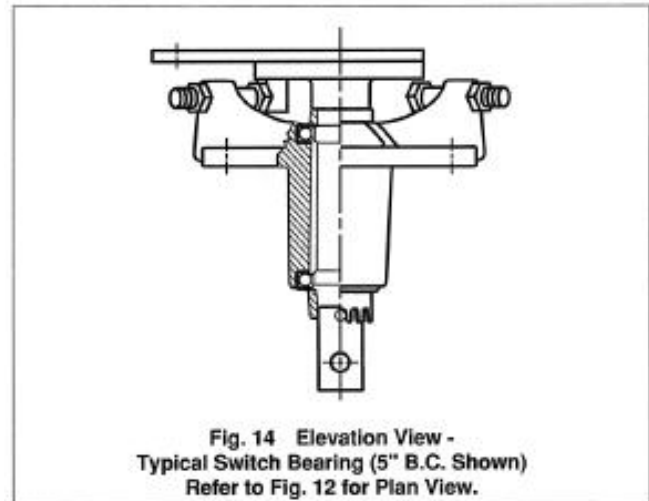


Fig. 14 Elevation View - Typical Switch Bearing (5" B.C. Shown) Refer to Fig. 12 for Plan View.

## MAINTENANCE

### WARNING

**Before servicing the switch, be sure it is disconnected from all electric power sources and properly grounded.**

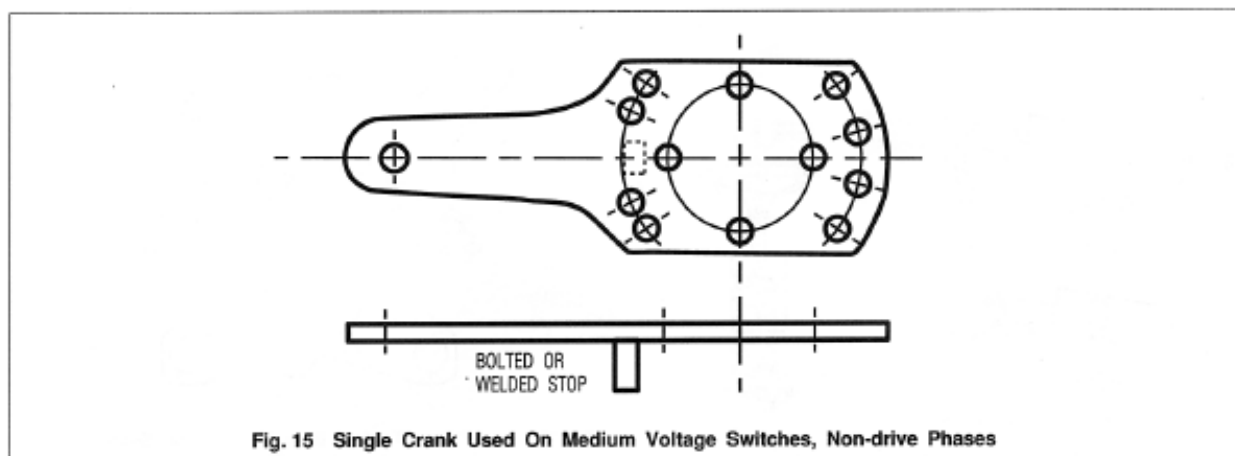
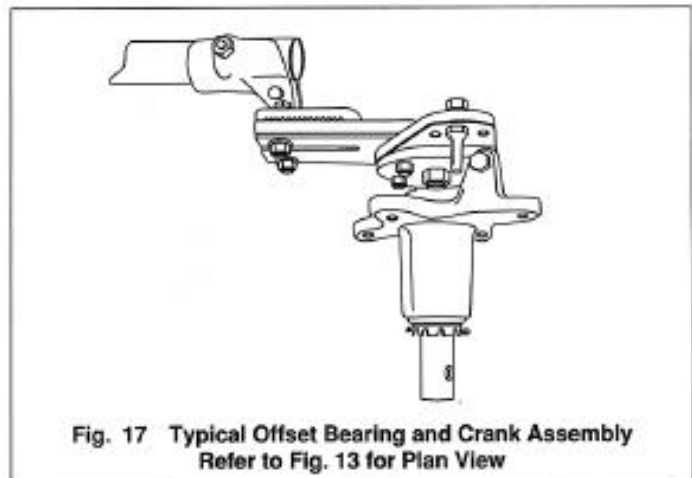
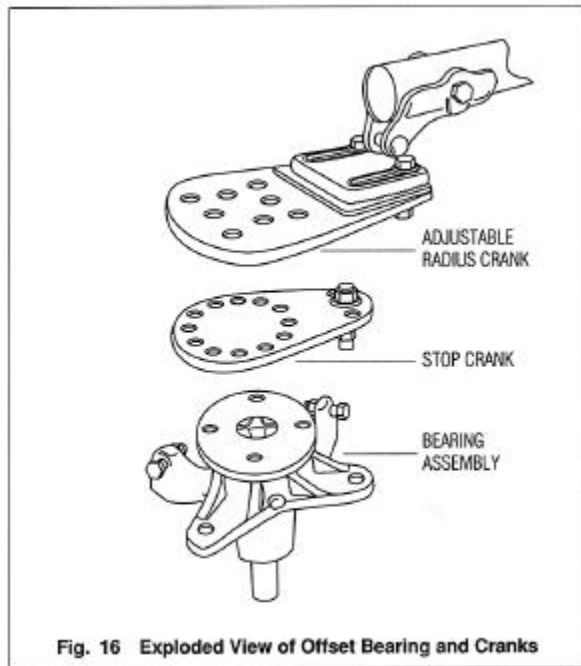
A certain amount of care and inspection is recommended. The frequency of inspection depends upon atmospheric conditions and frequency of operation. The service interval is largely determined by the user. Recommended maintenance is similar to that listed in the latest industry standards.<sup>1</sup> First, it is important that the insulators are always clean. It is also important

that the contacts be examined to see that they are aligned, clean, and have a firm uniform pressure. If the contacts are pitted, or burned to some extent, they should be removed and replaced. Under normal service conditions, the jaw contacts should be examined and maintained at least once a year, depending upon the type of atmosphere to which they are exposed.

Periodic maintenance should consist of cleaning the contact surfaces thoroughly by carefully scraping off any contamination or deposit and sanding the surface entirely clean, a coating of lubricant should be applied. Suggested lubricants are MOBIL 28 grease of NO-OX-ID "A Special". MOBIL 28 is an Exxon Mobil Company product. NO-OX-ID is made by SANDCHEM INC.

<sup>1</sup> ANSI C37.35 (American National Standard Guide for the Application, Installation, Operation and

Maintenance of High-Voltage Air Disconnecting and Interrupter Switches)



In general, operating linkages require virtually no maintenance. However, in contaminated atmospheres of where operation under sleet conditions is common some lubrication at pivot points may be desirable. The grease used should be durable even when exposed to the elements, and should retain its viscosity over a wide temperature range.

### COUNTERBALANCE

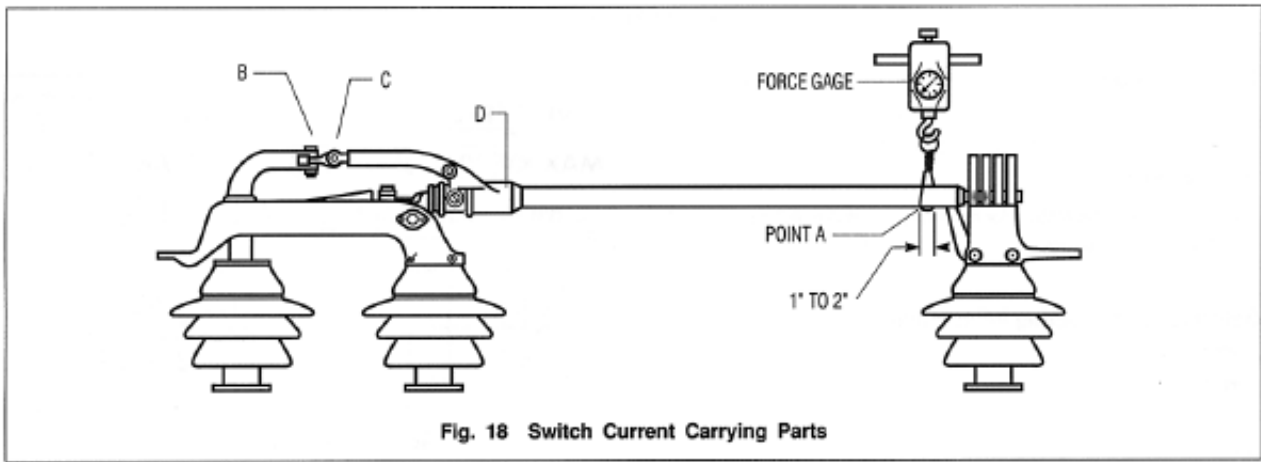
For voltage or current ratings in which blades are counterbalanced, Fig. 11 shows proper connections and the proper location of the drain holes for the various switch mountings. The counterbalances are assembled at the factory for the mounting positions as required for each installation. If it is necessary to change the mounting position of the switch in the field, the counterbalance must be changed, as described below.

### UPRIGHT TO VERTICAL

#### WARNING

**When performing this procedure, use care because parts are in tension.**

1. Open the switch blade to approximately the 75 degree position.
2. Clamp the plunger of the counterbalance with vise grip pliers against the face of the housing.
3. While maintaining a good hold on the blade with your hand, carefully open the blade a few more degrees or enough to relieve pressure.
4. Remove pin (A) which attaches the plunger to the blade hinge casting. Since this pin is larger in diameter at the center and two shoulders hold it in place, the pin may be a bit difficult to remove.



5. Lower the blade to approximately a 15 degree angle
6. At or near this point, the counterbalance plunger can be connected to the proper point for vertical mounting.
7. Raise the blade to relieve pressure.
8. Remove the vise grip pliers
9. File off any burrs on the counterbalance shaft.

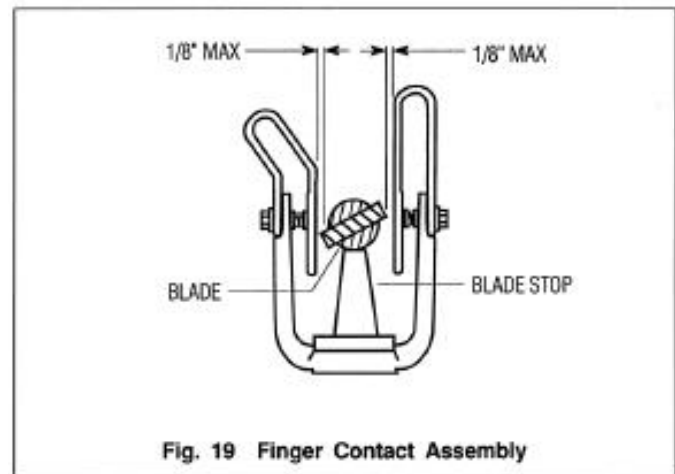
### CHANGE TO INVERTED

#### WARNING

When performing this procedure, use care because parts are in tension.

*Additional parts are required, contact the factory before proceeding.*

1. Start with the switch blade in the CLOSED position.
2. Clamp the counterbalance plunger with the vise grip pliers against the face of the housing.
3. Raise the blade slightly to relieve pressure.
4. Remove pin (A) which attaches the plunger to the blade hinge casting. Since this pin is larger in diameter at the center and two shoulders hold it in place, the pin may be a bit difficult to remove.
5. Remove pin (B) at the rear of the counterbalance. The unit is now free to invert, so that drain holes will be located as shown for inverted mounting.
6. Re-connect the rear of the counterbalance with Pin B.



7. Remove the jaw assembly from its support insulator.
8. Lower the blade below the CLOSED position and connect the counterbalance
9. plunger to the proper point for inverted mounting with pin (A).
10. Raise the blade to relieve pressure.
11. Remove the vise grip pliers.
12. File off any burrs on the counterbalance shaft created from the vise grip pliers.
13. Re-install the jaw assembly; hand tighten the bolts.

### BEARINGS

The bearing of each switch and offset bearing is a greaseless type. Fig. 12 shows the location of stop bolts and switch cranks on all switch bearings. Fig. 13 shows the required location of stop blots (5) and stop cranks (9) with a typical location of the adjustable radius crank (8) on the offset bearing. Fig. 14 is an elevation view of a switch bearing.

## CRANKS

The two switch poles that are not connected to the offset bearing normally use a single crank, similar to Fig. 15. The switch pole that is connected to the offset bearing (drive phase) uses either a solid double crank, or a two piece adjustable crank, as shown in Fig. 5. The offset bearing used a two piece adjustable radius crank plus a separate stop crank with multiple mounting holes for angular adjustment. Figs. 16 and 17.

## INSTRUCTIONS FOR SPECIAL SWITCHES

For switches specifically designed to operate under abnormal ice conditions, it is important that they be adjusted to assure the switch blade (on a closing operation) exerts force on the jaw stop.

### FORCE VALUES

<u>Switch Voltage</u>	<u>Force on Stop</u>
8.25 thru 169 kV	80 lbs.
242 thru 840kV	40 lbs.

The blade force adjustment should be made after the switch installation is complete, as described previously in this instruction manual, except for the corona rings.

The blade force adjustment is made as follows: Start with the three-pole switch in a position so that the blade end contacts are at least 1 foot from the stationary contact fingers. Using the manual operator, and observing one switch pole, lower the blade into the finger contact assembly and continue to close the switch to the point where it rests on the stop and there is approximately 1/8" clearance between the blade end contact and the stationary contact fingers on each side, see Fig. 19. This is the point at which the blade force is to be measured. It is important that the 1/8" clearance is obtained as the switch is being operated toward the closed position as described and never as the switch is being opened. This would cause an improper adjustment.

Using a force gauge, measure the force exerted by the blade on the jaw stop by either pushing

the blade up from below and noting the lbs. at which the blade is lifted off the jaw stop, or by putting a wire loop around the blade and lifting it with the gauge and noting the lbs. required. The place on the blade at which the force is measured should be just outside the finger contact assembly, see Fig. 18. If the force required is not proper, an adjustment must be made at the hinge end of the switch. To make the necessary adjustment, move the switch blade to a convenient point near the full open position and remove crank pin (B), Fig. 18, then move and twist blade or forked link (D) to disengage clevis (C) from crank.

If the force measured was too high, turn the clevis (C), 1/2 turn into the forked link (D). But if the force measured was too low, turn the clevis (C) 1/2 turn out of the forked link and re-connect the clevis. Check the threads on the clevis, some switches have right hand threads and others have left hand threads. Close the switch to the point previously described and again measure properly, another adjustment must be made. Repeat the procedure previously described. After one switch pole is satisfactorily adjusted, the other two poles should then be adjusted in the same manner.

Table 1 Lubrication Guide for Outdoor Switch Components			
Part Name	Type Lubricants Recommended	Amount Applied	Qty. Req'd. for (6) Three-pole Switches
Jaw Fingers	NO-OX-ID Grade "A" Special or Mobil 28 Grease	Medium Coat	
Blade Ends	NO-OX-ID Grade "A" Special or Mobil 28 Grease	Medium Coat	(1) Quart
Pins On current carrying parts	Mobil 28 Grease or DC-4	*	
Pins On control parts	Mobil 28 Grease or DC-4	Light Coat	(1) Quart
Bearing Areas On control parts	Mobil 28 Grease or DC-4	Medium Coat	
Terminal Connections	NO-OX-ID Grade "A" Special or NO 2 EJC	Heavy Coat	(1) Quart

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### ***RENEWAL PARTS***

Refer to the switch nameplate when ordering renewal parts. The nameplate is attached to the base assembly of each switch pole. The same data is shown on the record engineering drawings. The master file at the factory is linked to the serial number on the nameplate.

#### ***Renewal Parts Ordering Information***

Serial Number  
Switch Type  
Part Name  
Quantity Required  
Max. kV  
B.I.L. kV  
Cont. Amps  
Mom. Amps

*Refer your requests for renewal parts to the Factory.*

Pascor Atlantic  
Air Switch Division • State Route 42  
254 Industry Dr. • Bland, Virginia 24315-9709  
Phone: 276-688-3328 • Fax: 276-688-2228 or 2229  
[www.pascoratlantic.com](http://www.pascoratlantic.com)



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