



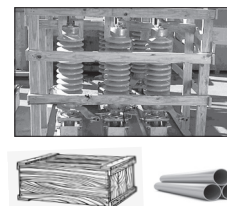
RDA-1 DOUBLE END BREAK DISCONNECT SWITCH INSTALLATION REFERENCE GUIDE

This guide is intended to be used as a **recommended** sequence of work steps but **does not** supersede the instruction manual (IB-111-RDA RDA-1) or assembly drawings. For assistance, contact the Southern States Service Division (available 24/7) at 770-946-4565.

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1 REVIEW BILL OF LADING (BOL)

- Check the materials received against the packing list
- Report any shortages or damaged equipment to Southern States
- A typical shipment will include:
 - 3 phase switch (base, insulators, & live parts)
 - Operating mechanism box
 - Operating pipe



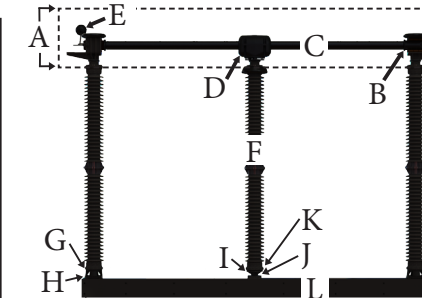
Note: All material is marked with JO number

Southern States LLC - Bill of Lading / Packing List									
SHIP TO:	SHIP FROM:	SHIP DATE:	SHIP TIME:	SHIP METHOD:	SHIP WEIGHT:	SHIP VOLUME:	SHIP VALUE:	SHIP INSURANCE:	SHIP NOTES:
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2 REVIEW BILL OF MATERIAL (BOM)

- Inventory all parts against the BOM found on the op-mech sheet inside the drawing package
- Report any missing or damaged parts to Southern States

D-20120020 BILL OF MATERIAL									
RDA 550 kV 4000 AMP UPRIGHT MOUNTING 5 TO 7 B.C.									
ITEM	DESCRIPTION	QTY	PART NO.	QTY	REV				
1	JAW ASSEMBLY	1	08181418	6	4				
2	NAMEPLATE	1	01450147	6	4				
3	BEARING ASSEMBLY	1	08127890	6	4				
4	ADAPTER	1	01760834	6	4				
5	CORONA RING BRACKET- RIGHT	1	14055527	18	6				
6	ARCING HORN ASSEMBLY	1	08181419	6	4				
7	HINGE MECHANISM ASSY	1	08131594	3	3				
8	CORONA SHIELD HALF	1	01710686	18	6				
9	CORONA SHIELD ASSEMBLY	1	08128181	6	4				
10	CORONA RING BRACKET- LEFT	1	14055526	18	24				
11	STUD 3/4 X 7 (A325)	1	01561142	36	36				
12	5/16 ST. STL. HEX NUT	1	01172120	36	36				
13	BEARING ARM	1	01761073	3	3				
14	5/16 X 1 1/2 ST. STL. HEX BOLT	1	01042024	36	36				
15	3/8 X 1/2 ST. STL. HEX BOLT	1	01043008	36	36				
16	1/8 ST. STL. PLAIN WASHER	1	01183104	36	36				



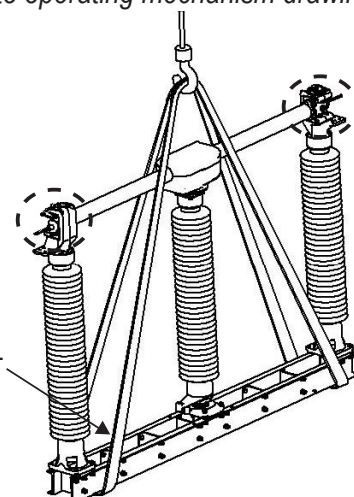
TERMINOLOGY OVERVIEW

- A: Live Parts
B: Switch Jaw[s]
C: Switch Blade
D: Hinge Mechanism
E: Arcing Horns
F: Rotating Insulator
G: Mounting Adapter[s]
H: Jack Screw[s]
I: Switch Arm
J: Bearing Stop[s]
K: Auxiliary Arm Mounting
L: Switch Base

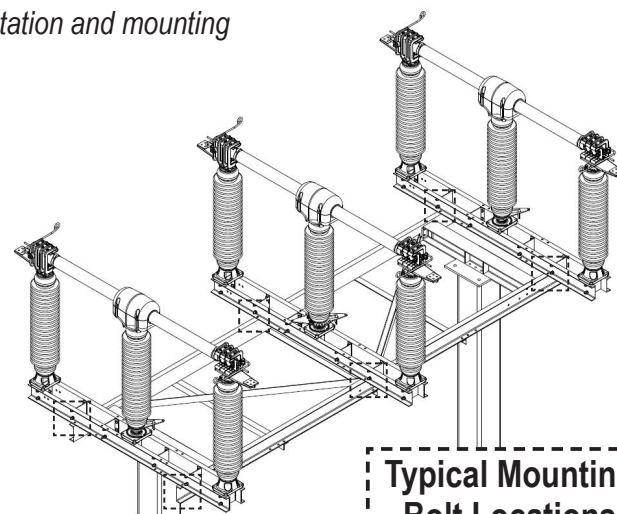
3 MOUNT PHASES PER ENGINEERING DRAWINGS

Refer to operating mechanism drawing for pole orientation and mounting

WARNING
Special Handling Required -
A qualified rigger and lift plan are
required due to possible off center,
high, center of gravity. Lift by switch
base only.



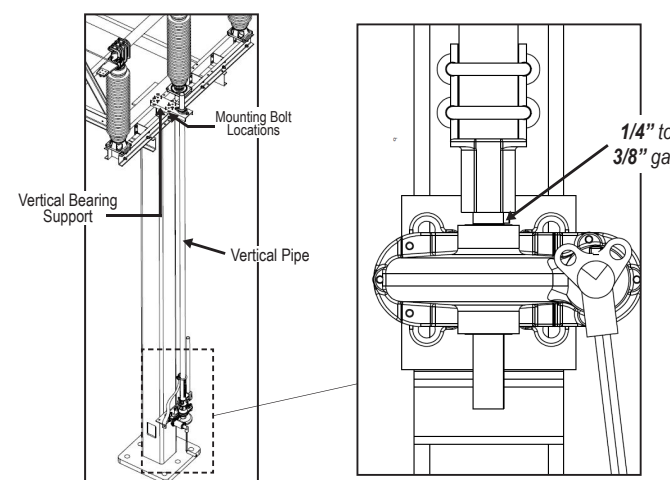
SECURE
BLADE WITH
TIES DURING
LIFTING



Typical Mounting
Bolt Locations

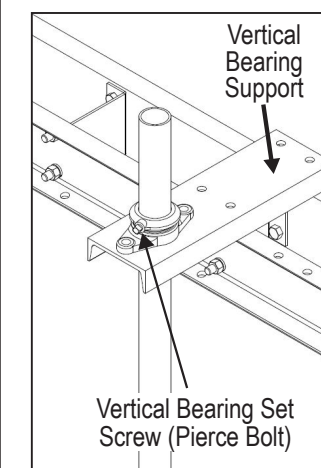
Refer To Instruction Book Section: **Installation & Adjustment Procedures**

4 MOUNT VERTICAL BEARING, PIPE, & OPERATOR



Refer To Instruction Book Section: **Installation & Adjustment Procedures**

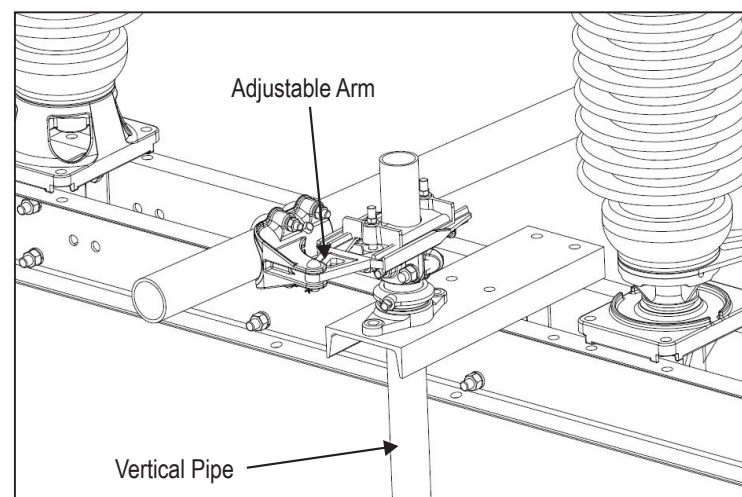
5 PIERCE VERTICAL BEARING SET-SCREW COMPLETELY



NOTE: This will be the **only** piercing
until step 13. Ensure the full weight of the
vertical pipe is supported by the vertical
bearing and maintain the gap required
between the coupling and gear operator.
Then pierce collar. Also, confirm auxiliary
arm assembly is correctly mounted per the
operating mechanism drawing.

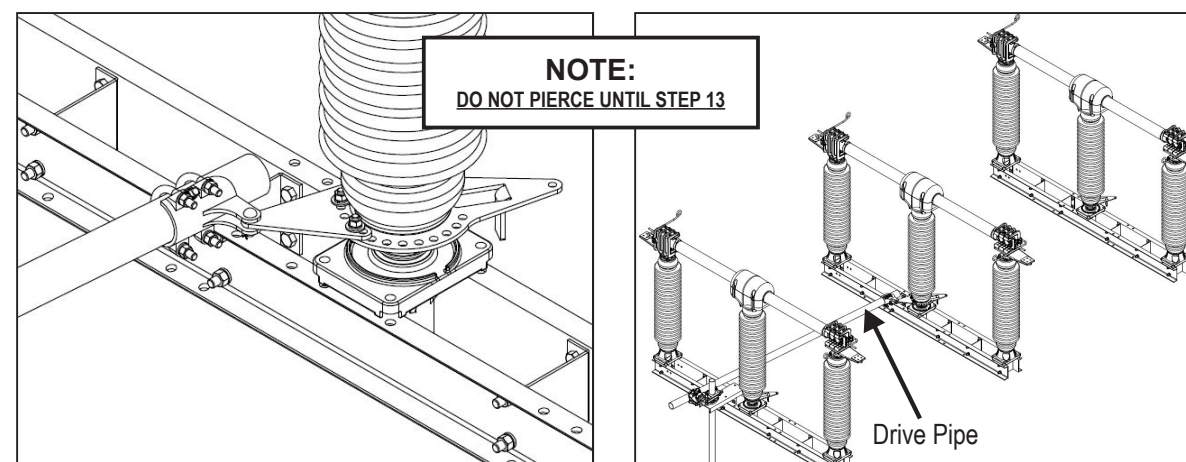
Refer To Instruction Book Section: **Installation & Adjustment Procedures**

6 INSTALL ADJUSTABLE ARM & DRIVE PHASE CLEVIS



Refer To Instruction Book Section: **Installation & Adjustment Procedures**

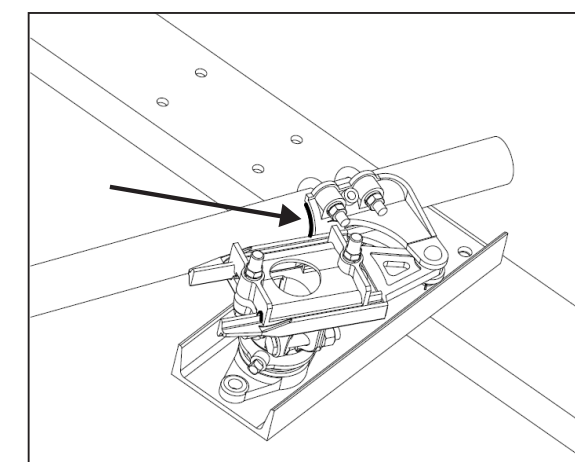
7 CONNECT & TIGHTEN DRIVE PIPE BETWEEN ADJUSTABLE ARM & AUXILIARY ARM OF DRIVE PHASE WITH APPROPRIATE CLEVISES



NOTE:
DO NOT PIERCE UNTIL STEP 13

Refer To Instruction Book Section: **Installation & Adjustment Procedures**

8 MATCH-MARK CLEVIS CONNECTIONS, ADJUSTABLE ARM, & OPERATOR COUPLING TO MONITOR SLIPPAGE

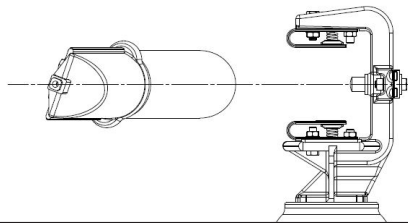


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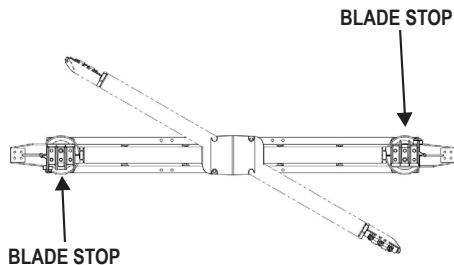
9 TEST-OPERATE THE DRIVE PHASE TO VERIFY ALL CRITERIA BELOW ARE MET.

NOTES:

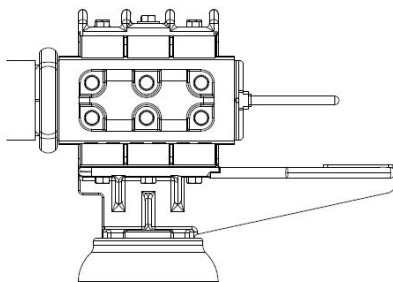
- THERE MAY BE VARIATIONS ON CONTACT PLACEMENT AT DIFFERENT AMPERAGE CLASSES.
- FOR ARCING HORN ADJUSTMENTS, REFER TO INSTRUCTION MANUAL.



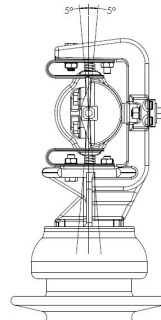
A.
The blade tips should enter the jaw centrally, without dragging on either contact surface. To correct alignment, adjust stationary insulators as necessary.



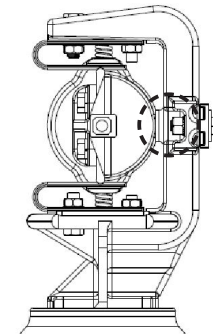
B.
The switch blade should hit both stops simultaneously.



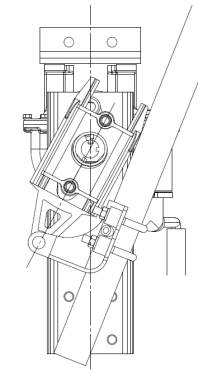
C.
Contact fingers must be centered on the blade tip in the full closed position.



E.
Contact bar must be within "+" or "-" 5 degrees from flat in the full closed position.



F.
Blade must fully rest on the blade stop inside the jaw in the full closed position.



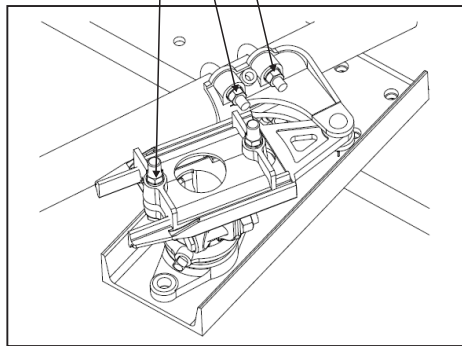
G.
Reach rod on op-mech should be toggled (snapped in) when it reaches the full closed position (toggle in full open position also preferred if possible).

Refer To Instruction Book Section: **Installation & Adjustment Procedures**

10 IF ADJUSTMENTS ARE NEEDED, REFER TO STEPS BELOW BASED ON THE SWITCH AND OPERATOR POSITION:

The adjustable arm should travel at least 180° from toggle closed to toggle open. Manually test operate and refer to steps (right) if adjustment is needed.

Loosen Bolts/Adjust Pipe & Arm



IF Switch Does Not Fully Open:

- Check for slippage
- Return switch to almost closed but not toggled
- Match-mark adjustable arm and pipe clevis
- Loosen adjustable arm and clevis bolts
- Lengthen both the adjustable arm radius & pipe clevis by 1/4" increments until full switch opening and operator rotation is achieved

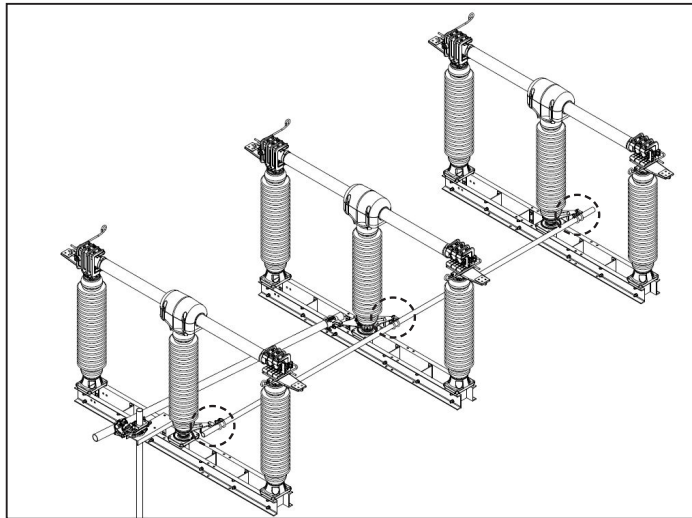
IF Switch Is Fully Opened Before Operator Reaches Full Open Position:

- Check for slippage
- Return switch to almost closed but not toggled
- Match-mark adjustable arm and pipe clevis
- Loosen adjustable arm and clevis bolts
- Shorten both the adjustable arm radius & pipe clevis by 1/4" increments until full switch opening and operator rotation is achieved

Refer To Instruction Book Section: **Installation & Adjustment Procedures**

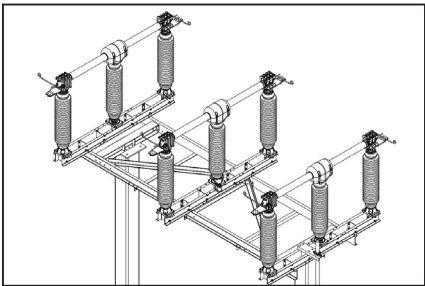
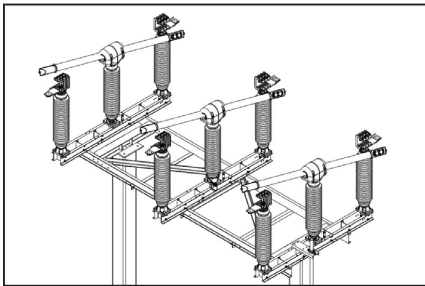
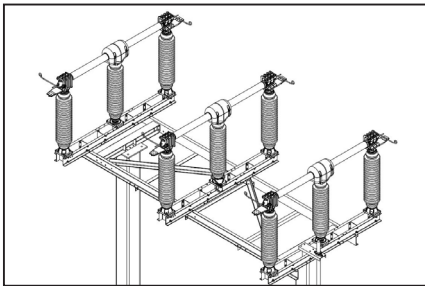
11 INSTALL INTERPHASE PIPE CONNECTING DRIVE PHASE WITH OTHER TWO PHASES - SECURE WITH CLEVIS BOLTS & ADJUST

Once the interphase pipe is installed, test operate. **If step 9 criteria are not met**, loosen interphase clevis and adjust by 1/4" increments as needed. Ensure the switch is fully closed by pushing on the lever arm, then re-tighten the clevises. Apply slight pressure to piercing bolts to prevent slippage.



Refer To Instruction Book Section: **Installation & Adjustment Procedures**

12 TEST OPERATE TO ENSURE ALL PHASES FULLY OPEN / CLOSE & MEET STEP 9 GUIDELINES



Refer To Instruction Book Section: **Installation & Adjustment Procedures**

13 FINAL CHECK & ASSEMBLY

- A.** Install any and all switch accessories (whips, **MACI**®, arcing horns, etc.) per their assembly drawings.
- B.** Test operate to ensure specification is met.
- C.** Land conductors to terminal pads and retest switch. Readjust switch *if necessary*.

- D.** Pierce all set-screws.
- E.** If motor operator is being used, ensure limit switches are set.
- F.** Ensure all accessories from the op-mech package are installed (ground shunt, VM-1 swing handle, etc.).

Refer To Instruction Book Section: **Installation & Adjustment Procedures**