

## S&C Trip Saver II

- **Caution:** The casing of the unit is energized @ 14.4 kV when unit is closed
- Non-reclose hand pulled turns on Single Trip
- Unit falls open once it has gone through programmed operations
- **NEVER BREAK LOAD WITH THE TRIP SAVER. USE UPSTREAM LOADBREAK CUTOUT.**
- Please refer to S&C Instruction sheet 461-502 for full Operating Guide



### Lockout with Non-reclosing lever up:

- Trip Saver will be open in the cutout.
- Unit has detected downstream fault and has gone through its auto reclose operations to lockout, most common auto reclose operations are 2A (fast) and 2C (delayed)
- After lockout the LCD display will show the fault current it has seen.

### Lockout with Non-reclosing lever down (Single Trip):

- Trip Saver will be open in the cutout.
- Unit has detected downstream fault and has gone to lockout with no auto reclose operations (single trip)
- After lockout the LCD display will show the fault current it has seen.

### For manual close (Single Trip):

- Pull down non-reclose handle before closing unit.
- Using insulated stick, hook into ring of recloser and firmly close trip saver back into cutout.
- If fault is still on the line the trip saver will go through one operation and fall open. **DO NOT TRY TO HOLD UNIT CLOSED.**
- Confirm the unit is closed by checking for potential on the load side of the recloser
- On successful reclose, the non-reclose handle can be pushed up to disable single trip.
- If district staff decides not to enable non-reclose when closing the trip saver and the fault is still there the customers downstream will see all of the programmed reclose sequences.

### Fails to close:

- If there is no potential after throwing the trip saver into the cutout and the display shows open the operator will need to place a 9 volt battery on the two screws as shown in the picture below to charge the capacitor and close the internal vacuum interrupter.



- The only time this should happen is if the Trip Saver went to lockout and failed to drop out of the cutout. At this point the recloser will not automatically close the internal vacuum interrupter because it did not drop out of the cutout. **This is why it is important not to hold the trip saver into the cutout when closing it back in.**

**For manual open:**

- When the operator needs to isolate the line for maintenance/construction activities it is important to note that this device cannot be pulled open and break load. **This recloser is not meant to break load.**
- Go to the upstream load break cutout and use that for isolation purposes.
- Confirm open by checking for potential on the load side of the recloser
- Caution, unit casing is still considered energized, due to the fact there are no case grounds

**Maintenance:**

- Trip Savers have no oil and operate on a vacuum interrupter; therefore no maintenance is needed on the operator
- The unit has a life monitor that is displayed on the LCD display. Once the life hits 0% the unit will drop open and never be allowed to close. At this point the trip saver will need to be replaced.

**LCD Display:**

- The normal screen on the Trip Saver will show either Open or Closed (status of the vacuum interrupter) and Auto or NR (non reclose)
- When a fault happens and the trip saver falls open the display will show the recorded fault current to help trouble shoot where the fault is located.
- The LCD is able to show the Status screen, Load Current, Last Fault Current, Number of Operations, Remaining Contact wear and the Temperature.
- By cycling the non-reclose handle up and down the LCD display will cycle every 10 seconds through the screens listed above.

**Operation Counter:**

- Operation counter will show total number of operations. In order to see the operation counter the non-reclose handle will need to be cycled down then up to get the LCD display to cycle through its programmed screens which one of them will be the counter.

**Suggested Signage for Pole:**

- Recloser location code – example 4F- 31

**Recloser Notes:**

- Unit can only be grounded when it is open and isolated via an upstream device (i.e. cut-out)
- No arrestors or ground wires on poles with Trip Saver
- The load side is the bottom side of the cutout.
- Reclosers common operations is four operations to lockout (same as today's ocrs)
- Black non-reclose handle down enables single trip.

**For Further Information:**

- Contact O&M Support Tech