CBS Arc Safe®

Distance Is Safety®

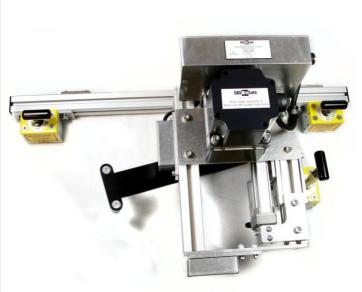
A Group CBS Company

RSA-100B

For Bolt-Loc - BP Series

Square D/GTE/Sylvania

800-2000A (With Paddle Trip Above Close Handle)





Distance is Safety®

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER? WE DO.

More Products by CBS ArcSafe[®]

RRS-1 - Universal Remote Racking System (Rotary)

The CBS ArcSafe® RRS-1 is a universal remote racking system capable of remotely installing and removing rotary style draw out circuit breakers without requiring any modification to the existing switchgear. Operation of the simple to use RRS-1 is quite intuitive and requires only minimal setup. When used properly, the RRS-1 allows technicians to remain outside of the arc flash boundary during the potentially dangerous racking operation.

RRS-2 – Universal Remote Racking System (Non-Rotary)

The CBS ArcSafe® RRS-2 is a universal remote racking system capable of remotely installing and removing non-rotary style draw out circuit breakers without requiring any modification to the existing switchgear. Operation of the simple to use RRS-2 is quite intuitive and requires only minimal setup. When used properly, the RRS-2 allows technicians to remain outside of the arc flash boundary during the potentially hazardous racking operation.

RRS-3 – Application Specific Remote Racking System (Rotary And Non-Rotary)

The CBS ArcSafe® RRS-3 product line is made up of various application specific remote breaker racking devices. Each standalone system allows service personnel to remotely install and remove a particular type of circuit breaker safely while stationed safely outside of the arc flash boundary during the potentially dangerous operation. The lightweight and compact design of the RRS-3 systems makes them ideal for hard to access areas where space is at a premium.

RRS-4 – PLC Based Universal Remote Racking System (Rotary)

The CBS ArcSafe® RRS-4 universal remote racking system is an updated PLC based version of the best selling RRS-1. The dual mode, source programmable, PLC based control system offers two different operating modes to choose from based on user preference or the application. The RRS-4 is capable of remotely installing and removing rotary style draw out circuit breakers without requiring any modification to the existing switchgear, allowing users to remain outside of the arc flash boundary during the potentially hazardous racking operation.

RSA - Remote Switch Actuator

The CBS ArcSafe® Remote Switch Actuator (RSA) product line is made up of various application specific remote operating devices. These products allow service personnel to remotely perform all aspects of an operation for a particular type of electrical equipment from outside the arc flash boundary – reducing or eliminating the possibility of serious injury or death resulting from an arc flash.

RSO – Remote Switch Operator

During a remote operation, the CBS ArcSafe® RSO functions as both the power supply and user interface for the device being remotely operated by the user. When paired with an applicable CBS ArcSafe® device, this portable standalone system allows service personnel to remotely perform a racking or switching procedure from outside the arc flash boundary – reducing or eliminating the possibility of injury or death resulting from an arc flash

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1 Installation

DANGER!

Before servicing any breaker, make sure that it matches the breaker discussed. If the breaker does not match the breaker described above, please call CBS ArcSafe® for more information.

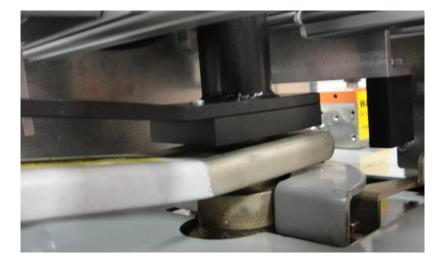
ATTENTION!

The location of certain items such as mimic bus, stickers, and/or placards may interfere with the proper installation of the RSA. Please remove or reposition these items before installing the RSA.

1. Ensure that the switch is free from any obstruction that may interfere with the proper installation of the RSA.



- 2. To adjust the RSA for accommodating unavoidable obstructions such as bolt heads or lock-out mechanisms, see the Adjustments section, and make any applicable adjustments to the RSA before attempting to install.
- 3. Place the RSA on the face of the switch ensuring that the central locator is seated over the nut on the switch handle.



4. Push the upper cross-member toward the switch grille until the upper locators are seated into the switch grille slots.





- 5. Turn the handles of the twit-lock magnets 180° clockwise to lock the RSA in place.
- 6. Verify that the trip arm on the RSA is located slightly below the trip lever on the switch.



The RSA is now ready for remote operation

2 Operation

ATTENTION!

Please ensure that all cables are clear of moving parts. Failure to do so may result in damage to cables and/or actuator.

ATTENTION!

Please ensure that the batteries to the RSO-IIID are fully charged or that the unit is plugged into AC power.

For detailed instructions on the operation of the RSO-IIID please see the RSO-IIID Manual.

- 1. Ensure that the RSA is properly installed. See the Installation Section for detailed instructions.
- 2. Connect the cables from the RSO-IIID to the RSA.
- 3. Turn the power switch on the RSO-IIID to the ON position.
- 4. Program the settings for the RSA into the RSO-IIID, if applicable. These settings will be found on a placard on the RSA. For more information on programming the RSO-IIID please refer to the RSO-IIID Technical Manual.
- 5. Ensure that the Auto-Retract (AR) function is set according to the instructions on the setting placard on the RSA. For detailed information on the AR function see the RSO-IIID instruction manual
- 6. Exit the arc flash boundary
- 7. Once the timers have been properly set press the CHARGE/CLOSE button to actuate the switch arm and close the switch.
- 8. Press the TRIP button to trip the switch with the trip paddle.





3 Adjustments

The RSA comes adjusted from the factory to fit most common configurations, and should not need to be adjusted in most cases. However, if adjustments do need to be performed, it is recommended that they be done on de-energized and isolated equipment to prevent possible damage or injury.

3.1 Locator Adjustment

The position of the locator on the RSA can be adjusted in order to avoid interference from items mounted to the switchgear door, or to accommodate slight differences in equipment.

1. Slightly loosen the two bolts on the locator plate, as shown below.





- 2. Insert the upper locators into the top row of vents in the grille above the switch handle.
- 3. Slide the RSAleft or right to align the central locator with the switch handle, as described in the Installation section
- 4. Once aligned retighten the bolts on the upper locators.

3.2 Motor Adjustment

The position of the locator on the RSA can be adjusted in order to accommodate differences in equipment.

- 1. With the RSA on the face of the switch, ensure that the central locator is aligned with the nut on the switch handle.
- 2. While supporting the motor, loosen the four bolts on the motor mount.



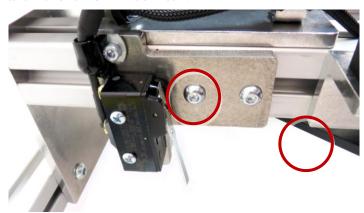
- 3. Slide the motor mount up or down to seat the central locator over the nut on the switch handle.
- 4. Once the central locator is properly seated, retighten the bolts on the motor mount.

3.3 Travel Adjustment

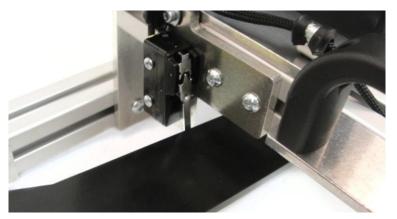
The travel length for the motor arm may be adjusted to avoid damage to the switch.

3.3.1 Lower Limit Switch

- 1. Ensure that the switch arm is in its lowered (horizontal) position.
- 2. Install the RSA, as described in the Installation section of this manual.
- 3. Loosen the two bolts on the lower limit switch.



4. Slide the limit switch away from the actuator arm until the switch is not touching the arm, them slowly slide it in toward the motor arm until an audible click is heard.



5. Retighten the bolts on the limit switch.

3.3.2 Upper Limit Switch

- 1. Ensure that the switch arm is in its raised (vertical) position.
- 2. Manually jog the motor arm on the RSA to its vertical position.
- 3. Loosen the two bolts on the upper limit switch.



4. Slide the limit switch away from the actuator arm until the switch is not touching the arm, them slowly slide it in toward the motor arm until an audible click is heard.



5. Retighten the bolts on the limit switch.

Notes





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RSA-100B Installation and Operation

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DANGER!

Ensure that personnel using this equipment are adequately trained in the operation of the switchgear they are planning to work with; that they are correctly stationed outside the arc flash boundary; and that they comply with all applicable Federal, State, Local, and In-house safety regulations and procedures. Attention should be given to distance, angle, and personal protective equipment (PPE).