

CBS ArcSafe®

Distance Is Safety®

A Group CBS Company

Installation and Operation

RSA-116

For S&C Load Break Switch
(With Protruding Handle Operator)



Distance is Safety®

WHAT STANDS
BETWEEN YOU AND
ARC-FLASH DANGER?

**WE
DO.**

2616 Sirius Road | Denton, TX 76208 | (877) 4-SAFETY | www.cbsarcsafe.com

Rev. 2/21/2018

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 obstructions that may interfere with proper installation of the RSA



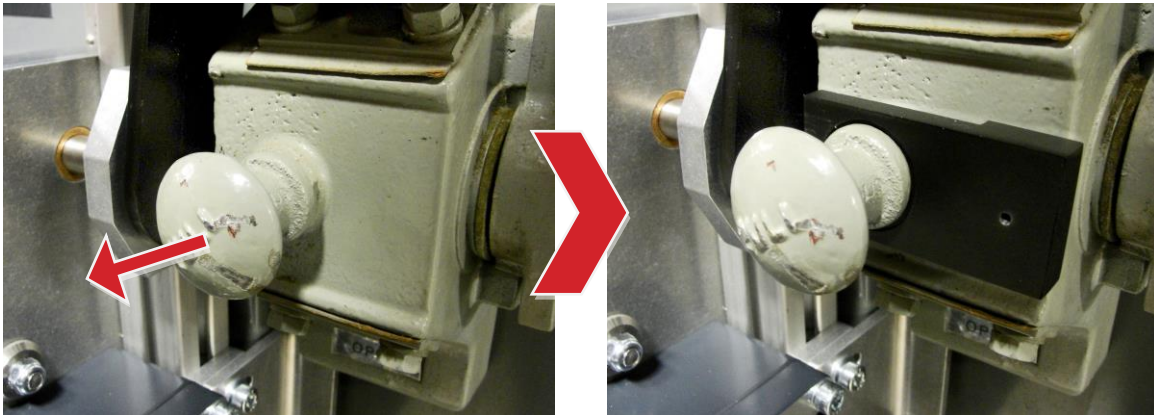
2. Position the actuator on the RSA to match the switch state, prior to installation. See the Operation section on how to operate the RSA.
 - a. If the switch is OFF and needs to be turned ON, then the actuator needs to be rotated down.
 - b. If the switch is ON and needs to be turned OFF, then the actuator needs to be rotated up.
3. Position the switch handle between the forks on the RSA actuator, and then carefully lower the RSA down onto the switch housing.



4. Position the RSA on the switch, ensuring that the upper and lower locators on the RSA align with the operator handle escutcheon, as shown.



5. Ensure the magnets are fully seated against the switch door and then turn the handles of the twist-lock magnets 180° to lock the RSA in place.
6. Install the interlock defeat by pulling the interlock knob out and sliding the defeat into the gap between the knob and switch escutcheon. Ensure that the recess in the interlock defeat tool is facing out toward the knob, so that the bottom of the knob sits in that recess. *Note that if the recess is not positioned properly, the interlock defeat could fall out during operation.*



The RSA is now ready for 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-I AR are fully charged or that the unit is plugged into AC power.

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

1. Ensure that the RSA is properly installed. See the Installation section for detailed instructions.
2. Plug the RSO-I AR into the motor control box.
3. Exit the arc flash boundary
4. Turn the power switch on the RSO-I AR to the ON position.
5. Ensure that the Auto Retract (AR) function is OFF
6. Press and hold CLOSE to turn ON the switch.
7. Press and hold TRIP to turn OFF the switch.



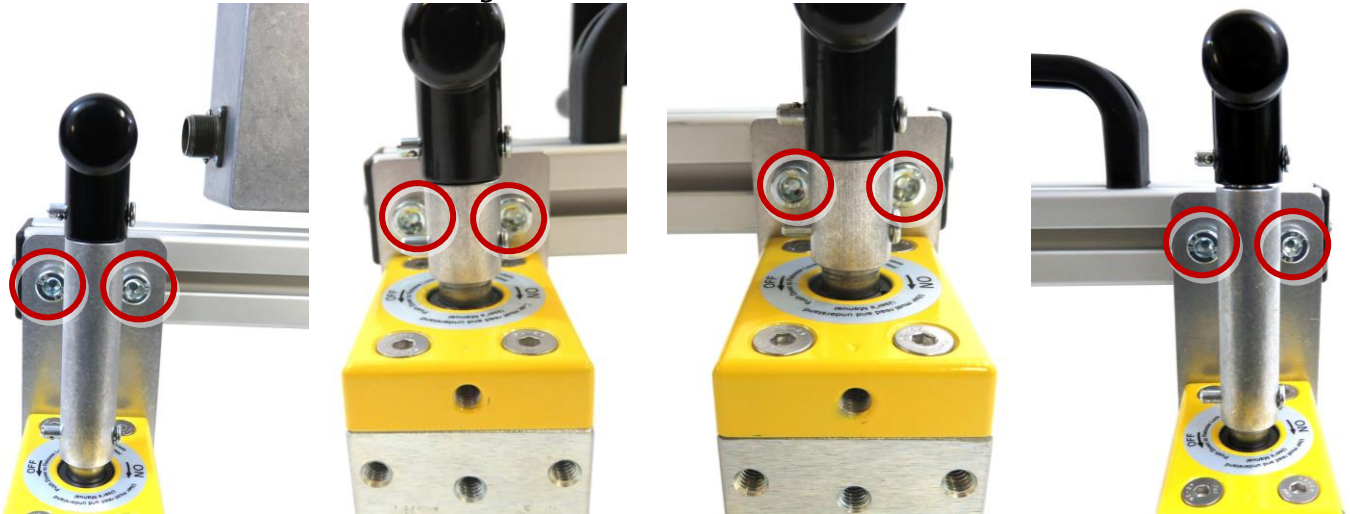
3 Adjustments

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 Magnet Position Adjustment

The position of the magnets on the RSA can be adjusted in order to avoid interference from items mounted to the switch door.

1. Loosen the two bolts on each magnet that needs to be moved, as indicated below.

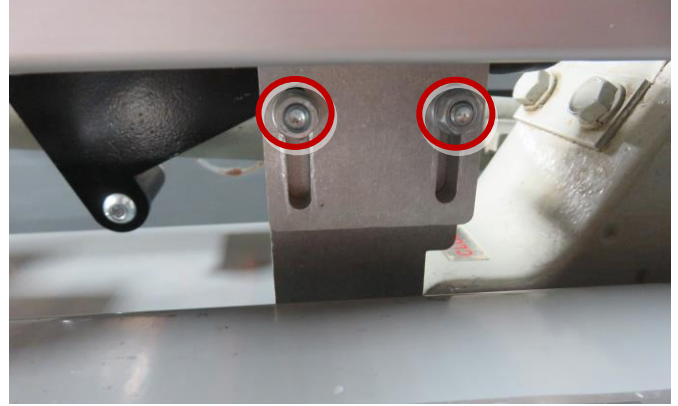
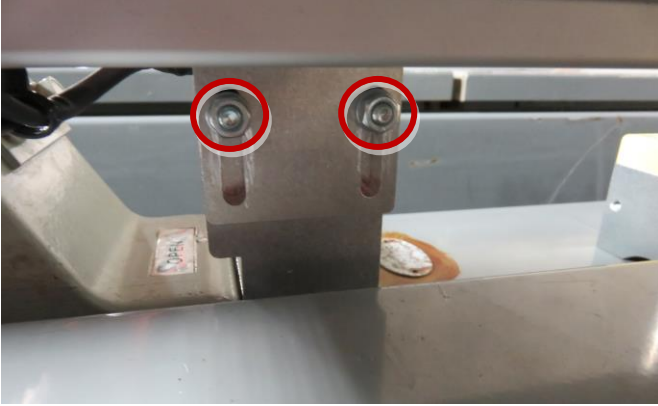


2. Install the RSA as described in the Installation section.
3. Slide each magnet along the extrusion as required so the RSA can be installed without interference.
4. Retighten any bolts that were loosened during adjustment.

3.2 Locator Depth Adjustment

The depth of locator on the RSA can be adjusted to accommodate depth differences between different pieces of switchgear.

1. Install the RSA as described in the Installation section of this manual.
2. Loosen the bolts on each locator, as indicated below.



3. Slide the locators in/out to that they align to the breaker escutcheon as described in the Installation instructions.
4. Re-tighten the bolts loosened for adjustment.



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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).