CBS ArcSafe®

Installation and Operation

RSA-135G

(For Eaton/Cutler-Hammer
Pringle Switch QA-800A
Legacy Handle)

Distance Is Safety®

CBS ArcSafe®
A Group CBS Company

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 consists of various application specific remote 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 consists of various application specific remote operating devices. These products allow service personnel to 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 operator's user interface and the power supply for the device. When paired with an applicable CBS ArcSafe® device, this portable standalone system allows service personnel to 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.

1 – Installation

<table>
<tr><td style="background-color:#c00000;color:white;">**Danger!**</td></tr>
<tr><td style="background-color:#f4cccc;">Before operating any electrical equipment, make sure that it matches the equipment discussed. If it does not match the equipment described, contact CBS ArcSafe® for more information.</td></tr>
</table>

<table>
<tr><td style="background-color:#38761d;color:white;">**Attention**</td></tr>
<tr><td style="background-color:#92d050;">The location of certain items such as mimic bus, stickers, and/or placards may interfere with the proper installation of the RSA-135G. Please remove or reposition these items before installing the RSA-135G.</td></tr>
</table>

1. Ensure that the breaker is free from any obstruction that may interfere with the proper installation of the RSA-135G.

2. Ensure that the handle adaptor is properly oriented to mate with the breaker handle as shown.

3. Place the RSA-135G on the face of the switch, ensuring that the handle adaptor fits over the switch handle.

4. Ensure that the frame locators on the left are properly inserted in the gap to the left of the switch door.

5. Secure the RSA-135G to the switch by turning the handle of the three magnets 180 degrees clockwise.
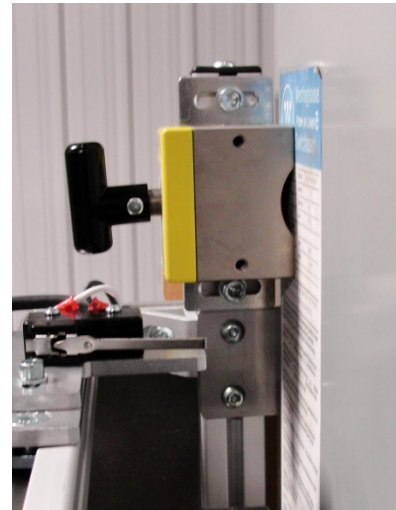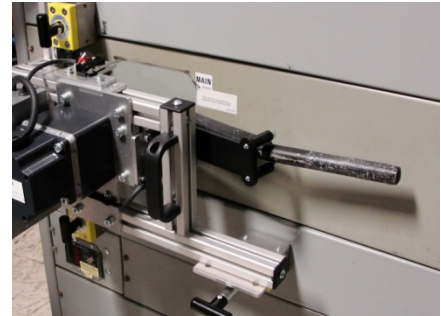
The RSA-135G is ready for remote operation
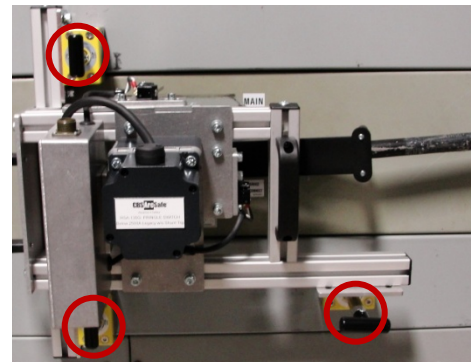
2 – Operation

<table>
<tr><td>**Attention**</td></tr>
<tr><td>**Please ensure that all cables are clear of moving parts. Failure to do so may result in damage to cables and/or actuator.**</td></tr>
</table>

<table>
<tr><td>**Attention**</td></tr>
<tr><td>**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.</td></tr>
</table>

1. Ensure that the RSA-135G is properly installed on the breaker as described in the previous section.

2. Open the RSO-I AR by disengaging the two latches on the front panel and lifting the lid.

3. Pull out the control cable from the storage bin inside the RSO and connect the cable to the RSA-135G motor control box and exit the arc flash area.

4. Power the RSO-I AR on by turning the green switch to the ON position.

5. If the breaker is ON and needs to be turned OFF then push the TRIP button on the RSO-I until the breaker is tripped.

6. If the breaker is OFF and needs to be turned ON then push the CLOSE button on the RSO-I until the breaker is closed.
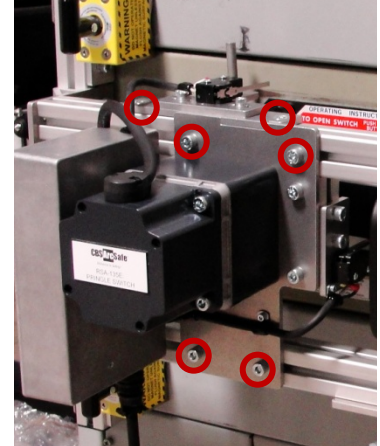
3 – Adjustments

Horizontal Adjustment

The RSA-135G can be adjusted to fit different cabinet styles.

1. Loosen the six M8 machine screws, there are four on the motor plate and two on the top of the frame
2. Slide the motor left or right to ensure a proper fit on the switch.
3. Retighten the six screws.

Limit Switch Adjustment

The limit switches can be fine tuned to ensure that the RSA-135G opens and closes the switch properly.

Upper Limit Switch

1. Ensure that the motor plate is in the correct position and the RSA-135G is installed properly.
2. Loosen the two M6 machine screws on the upper limit switch
3. Slide the upper limit switch right or left to increase or decrease, respectively, the travel of the switch arm.
4. Retighten the two screws.
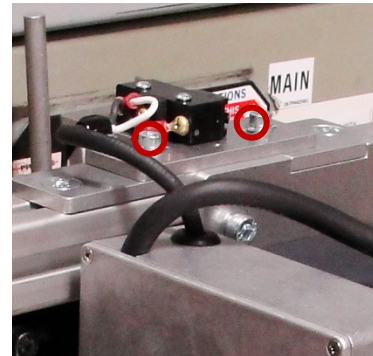
Righthand Limit Switch.

1. Ensure that the motor plate is in the correct position and the RSA-135G is installed properly.
2. Loosen the two M8 machine screws on the right-hand limit switch
3. Slide the right-hand limit switch down or up to increase or decrease, respectively, the travel of the switch arm.
4. Retighten the two screws.

Notes
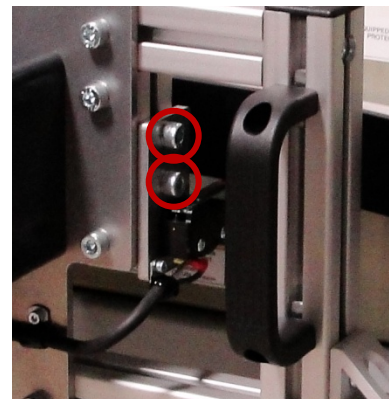
Distance Is Safety®

CBS ArcSafe®

A Group CBS Company

P.O. Box 550
Argyle, TX 76226
Tel: 940-382-4411
Fax: 940-382-9435
Website: www.CBSArcSafe.com
Email: info@CBSArcSafe.com

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).