# CBSArcSafe®

## Distance Is Safety®

A Group CBS Company

## RSA-113E

For Cutler Hammer L Frame 125-600A
M Frame 300-800A
Except LS, MS, Flush Mounted, Without Handle Extension



LINE

LOAD

## Distance isSafety®

WHAT STANDS
BETWEEN YOU AND
ARC-FLASH DANGER?

WE DO.

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*Rev. 5/16/2019*

### 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

# 1 **Installation**

1. First inspect the breaker to be remotely operated and ensure that if a lockout device is installed, that it matches the factory type in the picture on the first page.  This RSA device will not function properly if any other style of lockout device is present.
2. Align the locator on the RSA to the handle escutcheon, and then lower the RSA over the breaker handle ensuring that it is positioned between the rollers on the handle actuator.  Also ensure that the actuator motor on the RSA are oriented toward the OFF side of the breaker.
   a. If the breaker is turned OFF, and needs to be turned ON, extend the handle actuator on the RSA
   b. If the breaker is turned ON, and needs to be turned OFF, retract the handle actuator on the RSA.



3. Secure the RSA to the breaker by rotating the two twist-lock magnet handles clockwise until the RSA is securely in place.

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-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 set according to the placard on the RSA. If not specified, leave AR turned OFF.
6. Press and hold CLOSE to turn ON the breaker.
7. Press and hold TRIP to turn OFF the breaker.

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# 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 Position**

1. Loosen the two bolts holding the locator in place, as indicated below.
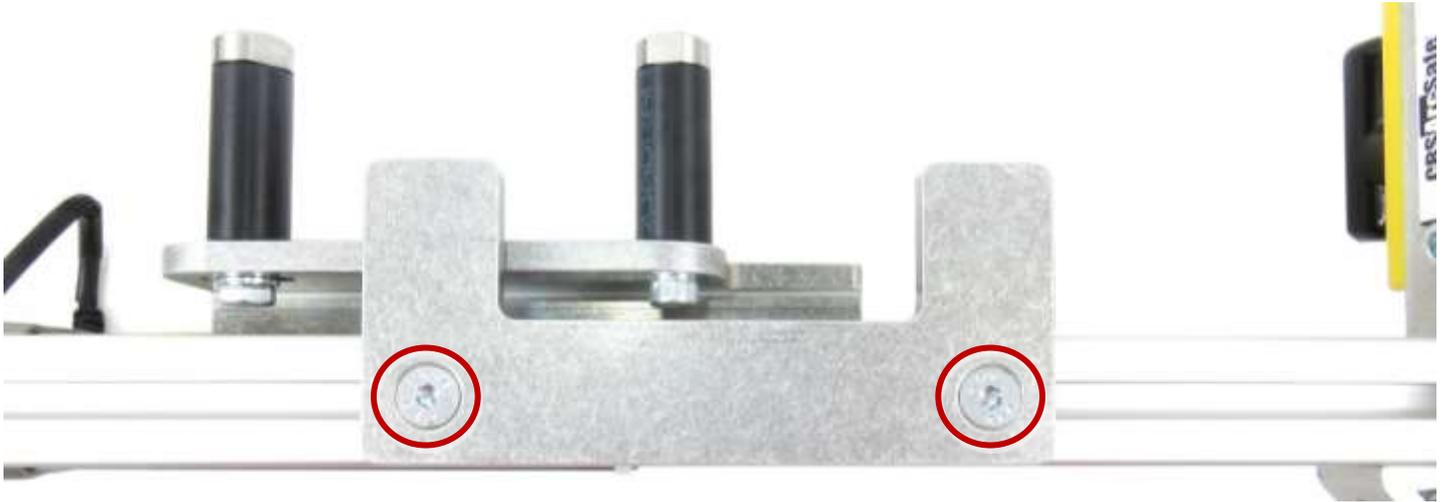


2. Install the RSA as described in the Installation section.

3. Slide the locator up or down the extrusion as required to the RSA sits flush against the switchgear, and the switch sits between the rollers on the RSA.

4. Remove the RSA and tighten the loosened bolts when adjustment is complete. Note that adjusting travel may be necessary after adjusting the locator.

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## *3.2* **Travel Adjustment**

1. Loosen the bolt holding the forward roller in place, as indicated below.
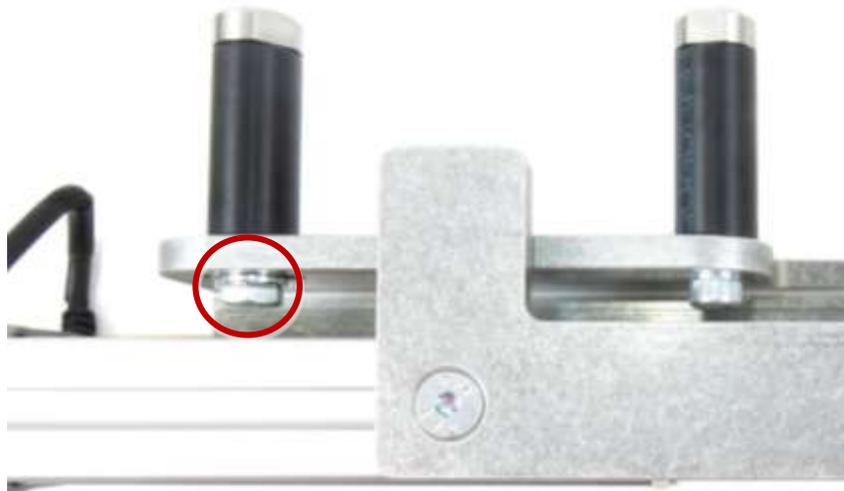


2. Install the RSA as described in the Installation section.

3. With the breaker in the ON position, slide the roller in its slot so the roller just touches the breaker operating handle.

4. Remove the RSA and tighten the loosened bolts when adjustment is complete.

# Notes

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Installation and Operation

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