

# CBS ArcSafe®

*Distance Is Safety®*

A Group CBS Company

Installation and Operation

## RSA-78A

For Cutler Hammer F2100, Advantage,  
Series 2100; Westinghouse 5 Star  
MCC Main



**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](http://www.cbsarcsafe.com)

Rev. 8/24/2015

## 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

Published and distributed by:  
CBS ArcSafe®  
2616 Sirius Road  
Denton, Texas 76208

A division of:  
GroupCBS, Inc.®  
P.O. Box 1557  
Gainesville, Texas 76241

Copyright CBS ArcSafe® 2013

Printed in the United States of America  
Reproduction, adaptation, or translation without prior written permission is prohibited except as is allowed by law.

# 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.

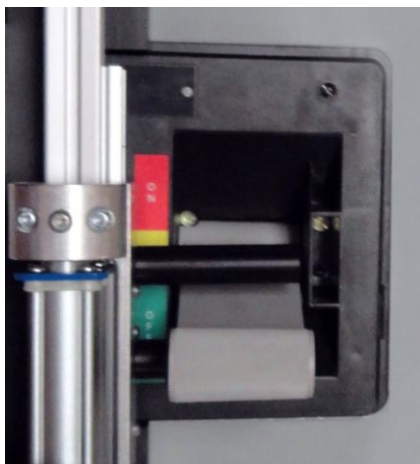
## ATTENTION!

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 area around the breaker is free from any obstruction that may interfere with the proper installation of the RSA.



2. Be sure to match the RSA orientation to the switch orientation. The arm on the RSA can be moved by hand if necessary.
  - a. If the switch is ON, the arm on the RSA needs to be fully extended.
  - b. If the switch is OFF, the arm on RSA needs to be fully retracted.
3. Ensure the RSA handle adapter fits properly around the breaker switch, and that the locators are flush against the top and bottom of the switch escutcheon.



4. Turn the handles of the twist-lock magnets 180° clockwise to lock the RSA in place
5. Place the motor control box so that the cord is out of the way of any moving parts.

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 Section 3 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. If the switch is OFF and needs to be ON, press and hold the CLOSE button on the RSO-I AR until the switch is turned ON.
7. If the breaker is ON and needs to be OFF, press and hold the TRIP button on the RSO-I AR until the switch is turned OFF.



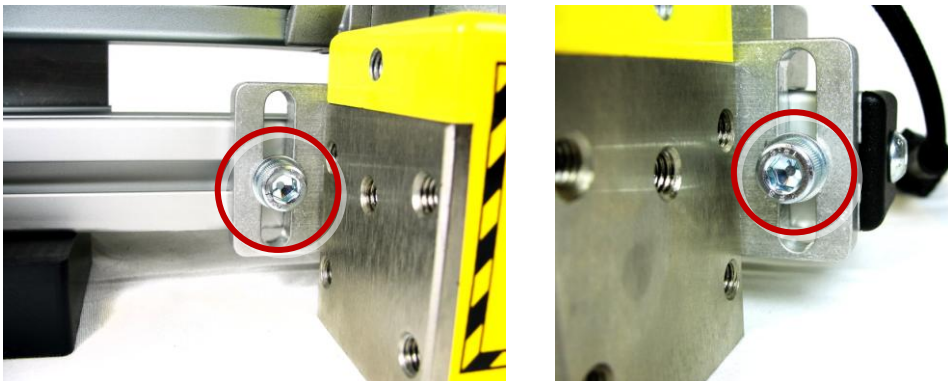
## 3 Adjustments

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 Adjustment

The magnet depth and positioning on the RSA can be adjusted to accommodate some obstructions, such as bolt heads, around the switch.

1. Install the RSA on the face of the switch as described in the Installation section.
2. Loosen the two bolts on each magnet plate, as indicated below.



3. Install the RSA on the breaker as described in the Installation section of this manual.
4. Slide each magnet as required to accommodate any obstructions present on the switchgear, and so that the magnets sit flush to the switchgear.
5. Re-tighten the loosened bolts.







*Distance Is Safety*®

A Group CBS Company

RSA-78A  
Installation and Operation

2616 Sirius Road  
Denton, TX 76208  
Tel: 877-4-SAFETY  
Fax: 940-382-9435  
Website: [www.CBSArcSafe.com](http://www.CBSArcSafe.com)  
Email: [info@CBSArcSafe.com](mailto: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).