

# CBS ArcSafe®

*Distance Is Safety®*

A Group CBS Company

Installation and Operation

## RSA-153A

For Westinghouse Type FDP/Cutler-Hammer  
Type M50 Fusible Panelboard Switch  
30, 60, & 100A Twin (5.5" Height)



**Distance is Safety®**

WHAT STANDS  
BETWEEN YOU AND  
ARC-FLASH DANGER?

**WE  
DO.**

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## 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.

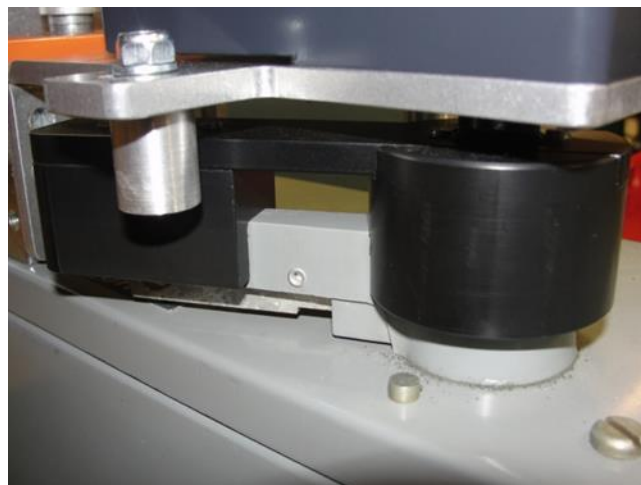
## ATTENTION!

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 to be operated is free from obstructions that may interfere with proper installation of the RSA



2. Place the RSA over the handle on the switch. Ensure that the switch actuator arm is fully seated in the handle actuator on the RSA.
  - a. The handle adapter on the RSA can be manually rotated to match the switch position as needed.



3. Ensure the magnets are fully seated against the switch cover and then turn the handles of the twist-lock magnets 180° to lock the RSA in place.

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



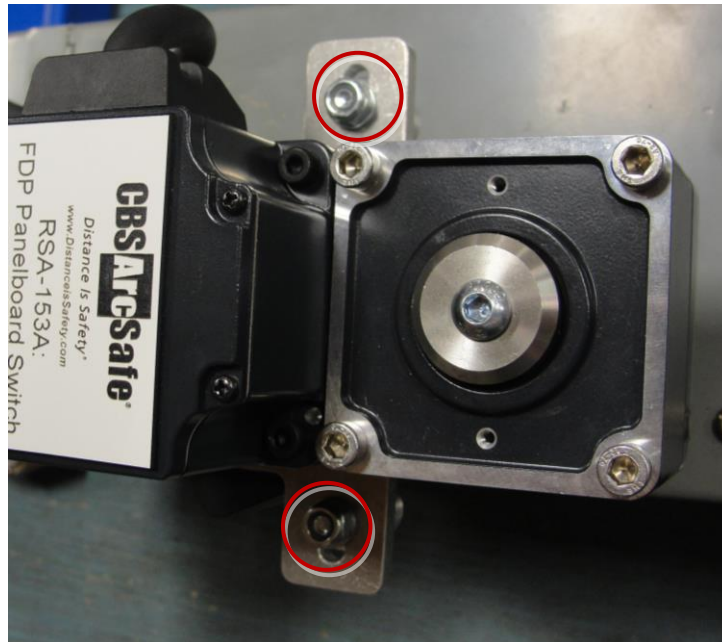
## 3 Adjustments

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 Travel Limit Adjustment

The motor arm stops can be adjusted to fit varying travel of the panel switch.

1. Loosen the bolt on the travel limit stud to be adjusted, indicated below.



2. Attach the RSA as described in the Installation section.
3. Rotate the RSA's actuator arm to match the orientation for position of the switch to adjust travel.
4. Slide the stop beign adjusted to the RSA's actuator arm until it just contacts the arm. Re-tighten the bolt.
5. If required, repeat the above steps for the other travel stop.

## 3.2 Operator Depth

The height of the RSA can be adjusted to fit the slight variances of each switch.

1. Loosen the two bolts on the magnet mount plate, as well as the two bolts on the magnet located on the opposite side of the RSA.



2. Attach the RSA as described in the Installation section.
3. Slide the operator in or out so the RSA is properly aligned and positioned on the switch.
4. Re-tighten the bolts from Step 1





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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).