# CBS Arc Safe®

Distance Is Safety®

A Group CBS Company

**RSA-35** 

For Westinghouse 11-300 Motor Control Center (Size 1-4, Small Handle)

TRIPPED



**Distance** is Safety®

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER? WE DO.

# More Products by CBS ArcSafe<sup>®</sup>

#### 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 performing a remote operation on any electrical equipment, please make sure that it matches the electrical equipment shown and described on the cover. If the electrical equipment does not match that shown and described on the cover, please contact CBS ArcSafe® for more information regarding remote operation solutions for the equipment in question.

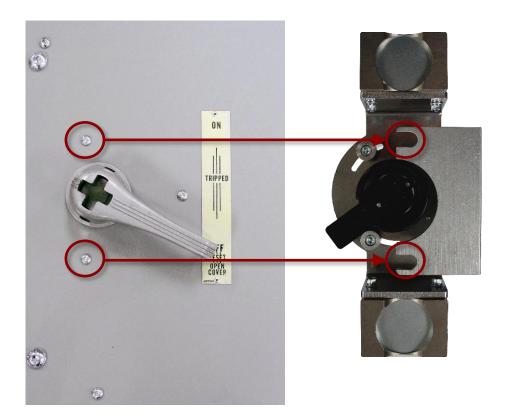
### **ATTENTION!**

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 MCC bucket door is free from any obstruction that may interfere with the proper installation of the RSA as shown in the following image.



- 2. Manually rotate the handle adapter on the RSA-35 to match to position of the MCC handle.
- 3. Next, place the RSA-35 on the face of the breaker, ensuring that the handle adapter is properly seated over the MCC handle and the two magnets sit flush against the MCC door.
- 4. Ensure the two cutouts in the lower locator match up with the rivets/screws in the MCC door which hold the MCC handle in place. The following image shows the location of the cutouts and the rivets/screws they should clear.



- 5. Ensure that the RSA-35 is aligned vertically and not tilted.
- 6. Once the RSA-35 is correctly positioned on the the MCC bucket, secure it to the bucket by turning the handles of the two twist-lock magnets 180° clockwise.
- 7. Lastly, attach the motor control box to the MCC door in a location that does not interfere with any moving parts.
- 8. The RSA-35 is now ready for remote operation and should resemble the following image.



# 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 1 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 MCC bucket is OFF and needs to be turned ON, press and hold the CLOSE button on the RSO-I AR until the MCC is ON.
- 7. If the MCC bucket is ON and needs to be turned OFF, press and hold the TRIP button on the RSO-I AR until the MCC is OFF.



# 3 Adjustments

# 3.1 Travel Adjustment

The travel length for the motor arm may be adjusted avoid damage to the MCC handle.

- 1. Install the RSA on the face of the MCC bucket as described in the Installation section.
- 2. Loosen the nuts and bolts for the two motor travel stops shown in the image below.

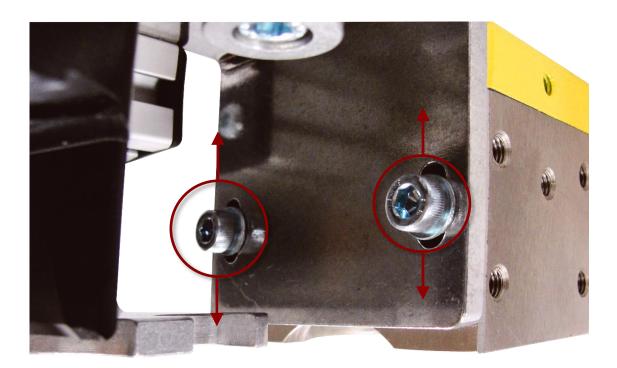


- 3. With the MCC in the ON position, slide the upper motor stop toward the arm until it touches, then tighten the nut and bolt.
- 4. With the MCC in the OFF position, slide the lower motor stop toward the arm until it touches, then tighten the nut and bolt.

# 3.2 Height Adjustment

The height of the unit may be adjusted to fit protruding handle operators.

- 1. Install the RSA on the face of the MCC bucket as described in the Installation section.
- 2. If the handle adapter does not sit perfectly flush agasinst the top side of the MCC handle when the two magnets are flush to the surface of the MCC door the the height should be adjusted.



3. Loosen the two bolts shown below to allow the magnet to sit flush to the surface of the MCC door while the handle adapter sits flush to the top side of the MCC handle. Repeat for each of the two magnets found on the RSA-35.

# **Notes**





# CBS Arc Safe®

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A Group CBS Company

RSA-35
Installation and Operation

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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).