# CBS Arc Safe®

Distance Is Safety®

A Group CBS Company

RSA-2

Pushbutton
(All Manufacturers and Gear,
0.500" Max Travel, 10lbf Max Force)



Distance is Safety®

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER?

WE DO.

#### 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 Introduction

This manual describes the installation and operation procedures for the Remote Switch Actuator (RSA-2). Do not use this manual as a reference for the operation of any breaker or as an installation guide for any other CBS ArcSafe® product. Please read and follow these instructions carefully. Failure to follow these instructions may result in personal injury or property and equipment damage.

#### 1.1 Description

The RSA-2 will perform CLOSE/TRIP operations on all types of light duty pushbutton operators. The use of the RSA-2 for operations will greatly increase the safety of the operator by positioning the operator outside of the arc flash boundary.

#### ATTENTION!

There are two models of the RSA-2 available - one for light duty applications and one for heavy duty applications. The light duty application RSA-2 utilizes a basic solenoid for operation, whereas the heavy duty RSA-2 is built using a linear actuator. To determine which model will suit specific needs please contact CBS ArcSafe®

#### 1.2 Components

The components of the RSA-2 are shown in the image, and listed below:

- 1. Adjustment Screw
- 2. Mounting magnet
- 3. Solenoid
- 4. Plunger





### 2 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. Mount the RSA to the face of the control cabinet or breaker.
- 2. Be sure to line up the plunger on the solenoid with the pushbutton. If the plunger needs to be adjusted for proper positioning, see the Adjustments section of this manual.

#### **ATTENTION!**

Additional hardware is available to allow for installation on the of the RSA-2 on non-metallic surfaces such as molded case breakers, contact CBS ArcSafe for more details.

The RSA-2 is now ready for remote operations



# 3 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-1 is properly installed. See the Installation section for detailed instructions.
- 2. Plug the RSO-I AR into the solenoid on the RSA-2.
- 3. Exit the arc flash boundary
- 4. Turn the power switch the RSO-I AR to the ON position.
- 5. Ensure that the Auto Retract (AR) function is OFF
- 6. To activate the solenoid press the CLOSE button on the RSO-1 AR



# **4 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.

## 4.1 Solenoid Depth Adjustment

1. Using a 5mm Alen wrench, loosen the adjustment screw on the mounting bracket to allow for adjustment of the solenoid.



- 2. Slide the solenoid along the bracket to place the plunger approximately 1/8" from the pushbutton.
- 3. Retighten the adjustment screw.

# **Notes**



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RSA-2
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).