Installation and Operation

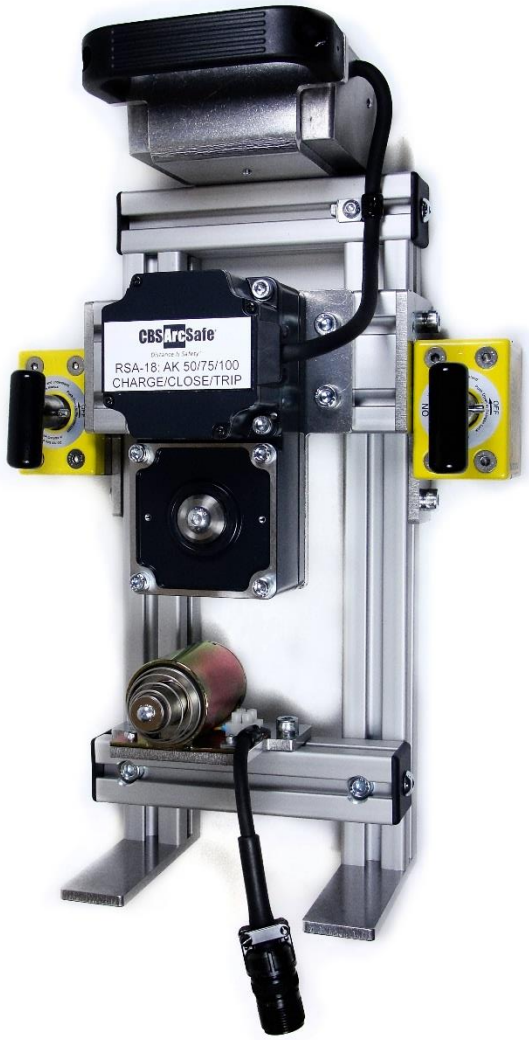
CBS ArcSafe®

Distance Is Safety®

A Group CBS Company

RSA-18

For GE AK-1/2/3(A)-50/75/100
(Manually Operated)



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

Rev. 2/7/2018

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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CBS ArcSafe®
2616 Sirius Road
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A division of:
GroupCBS, Inc.®
P.O. Box 1557
Gainesville, Texas 76241

1 Installation

DANGER!

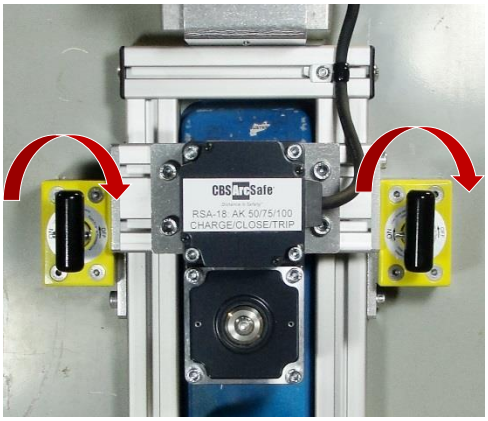
Before servicing any breaker, make sure that it matches the breaker discussed. If the breaker does not match the breaker described above, please call CBS ArcSafe® for more information.

ATTENTION!

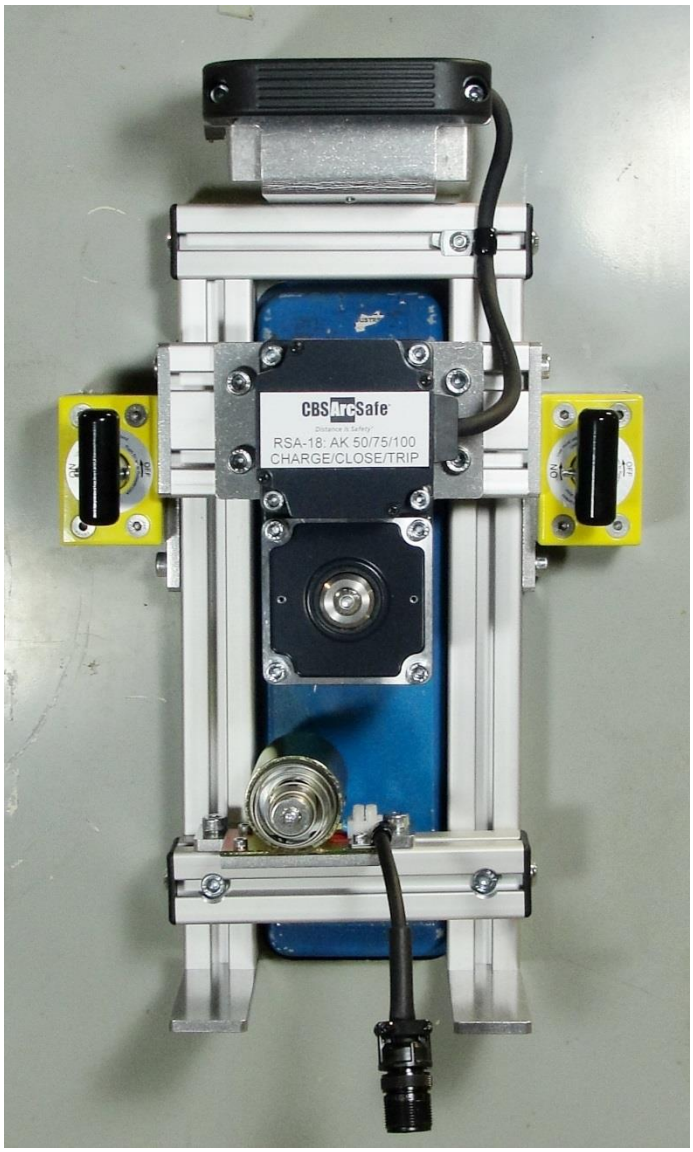
The location of certain items such as mimic bus, stickers, and/or placards may interfere with the proper installation of the RSA. Please remove or reposition these items before installing the RSA.

1. Ensure that the switch is free from any obstruction that may interfere with the proper installation of the RSA.
2. Remove the charging handle from the breaker by loosening and then removing the set screws found on the base of the handle.

3. To adjust the RSA for accommodating unavoidable obstructions such as bolt heads or lock-out mechanisms, see the Adjustments section, and make any applicable adjustments to the RSA before attempting to install.
4. Align the RSA with the escutcheon of the breaker and turn the handles of the twist-lock magnets 180° clockwise to lock the RSA 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-IIID are fully charged or that the unit is plugged into AC power.

For detailed instructions on the operation of the RSO-IIID please see the RSO-IIID Manual.

1. Ensure that the RSA is properly installed. See the Installation Section for detailed instructions.
2. Connect the cables from the RSO-IIID to the RSA.
3. Turn the power switch on the RSO-IIID to the ON position.
4. Ensure that the Auto-Retract (AR) function is set according to the placard on the RSA. For detailed instructions on the AR function see the RSO-IIID manual
5. Program the settings for the RSA into the RSO-IIID. These settings can be found on the placard on the RSA. For more information on programming the RSO-IIID please refer to the RSO-IIID Technical Manual.
6. Exit the arc flash boundary
7. Once the timers have been properly set press the CHARGE/CLOSE button to actuate the motor arm to charge and close the breaker.
8. Press TRIP to trip the breaker.

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 Motor Height Adjustment

The height can be adjusted in order to ensure proper location of the handle adapter onto the switchgear.

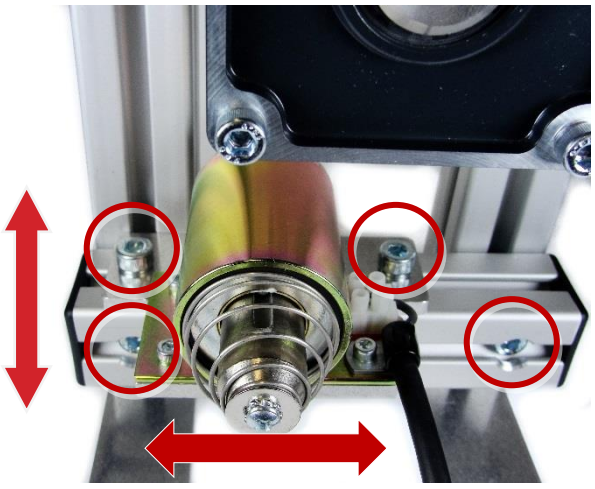
1. Allign the handle adapter onto the switchgear as described in the Installation section.
2. Loosen the two bolts on each of the two magnet/motor mounts, as shown below.

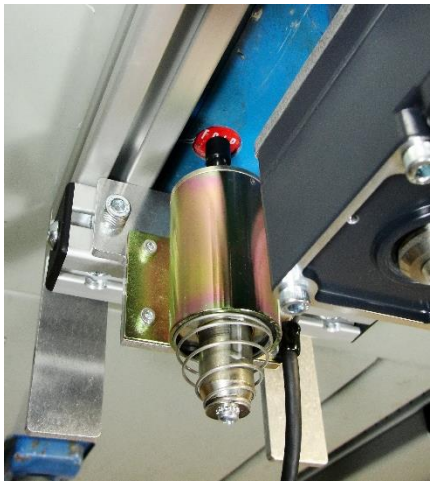
3. With the handle adapter fuly seated on the switchgear, slide the frame up or down as needed to ensure the frame of the RSA is properly located on the escutcheon.
4. Re-tighten the bolts on each of the two magnet/motor mounts.

3.2 Solenoid Position Adjustment

The position of the solenoid on this RSA can be adjusted to ensure that the plunger is aligned with the trip button.

5. Loosen the bolts on the solenoid mount and move the assembly up, down, left, or right to align the plunger over the trip button, as shown.



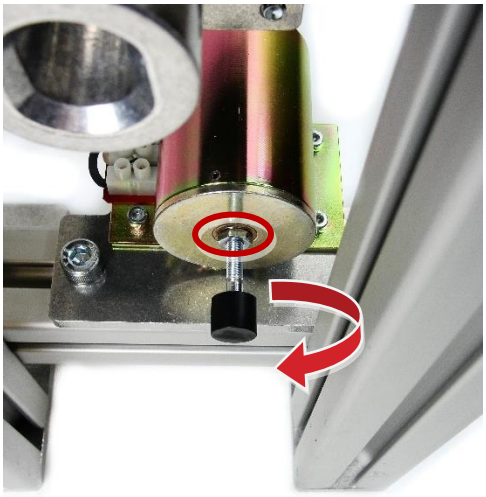


6. Re-tighten the bolts on the solenoid mount.

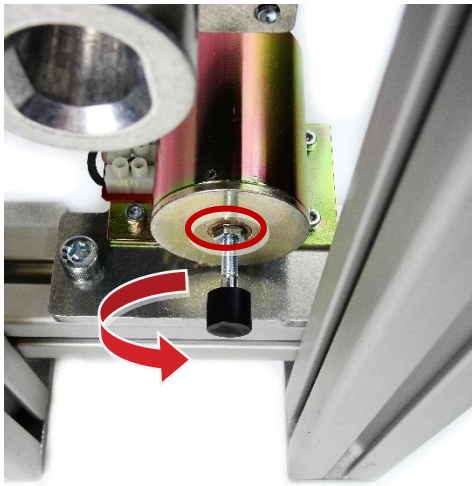
3.3 Plunger Depth Adjustment

The operation depth of the solenoid on this RSA can be adjusted to accommodate differences in the button-press depth requirements.

7. To increase the solenoid plunger depth, loosen the nut on the solenoid plunger, and turn the black end counter-clockwise. Test the depth by operating the appropriate plunger with the RSO, and re-tighten the nut.



8. To decrease the solenoid plunger depth, loosen the nut on the solenoid plunger, and turn the black end clockwise. Test the depth by operating the appropriate plunger with the RSO, and re-tighten the nut.



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2616 Sirius Road
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Tel: 877-4-SAFETY
Fax: 940-382-9435
Website: www.CBSArcSafe.com
Email: 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).