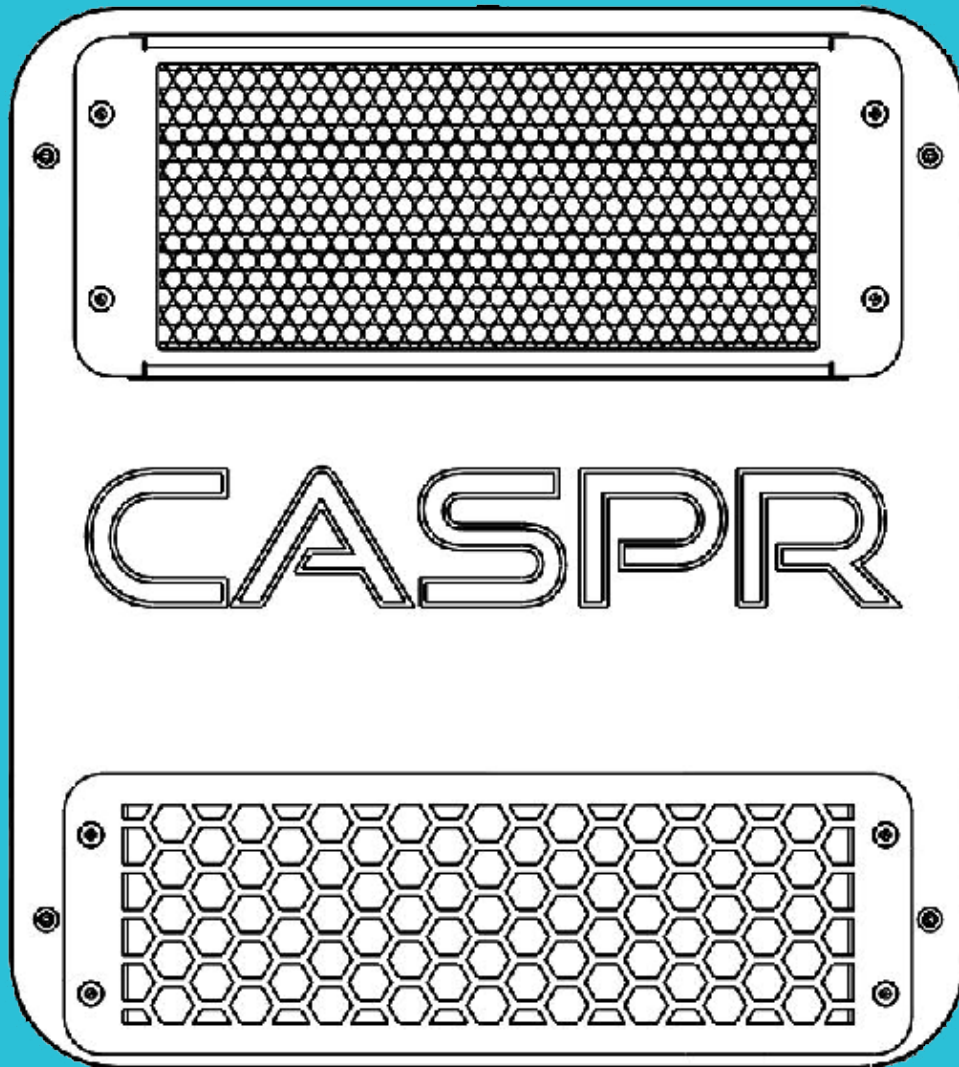




# TRANSIT

Air & Surface Disinfection



## OWNER'S MANUAL

CAUTION: Read manual carefully for proper procedures and operation.

## Congratulations

on your purchase of a CASPR Technologies enhanced air and surface disinfection system. This unit is designed to be mounted into any vehicle. Please read and follow all safety warnings and service procedures outlined in this manual. Use only genuine CASPR Technologies replacement parts available from your CASPR Technologies Distributor.

*If you have any questions concerning this or any CASPR Technologies product, contact your CASPR Technologies Distributor.*

## Principles of Operation

CASPR Transit uses Natural Catalytic Conversion (NCC) to generate safe, low levels of hydrogen peroxide. NCC technology replicates natural purifying processes by using a high intensity light to activate a proprietary metal catalytic coating, converting water vapor into hydrogen peroxide. Hydrogen peroxide acts as an oxidizer inactivating surface and air pathogens. It can compromise cellular integrity by disrupting cell walls, or internal molecular structures, rendering contaminants harmless.

To learn more about the CASPR Transit and other CASPR Technologies products and technologies, please visit our website at [www.casprtech.com](http://www.casprtech.com).

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# IMPORTANT SAFETY INSTRUCTIONS



When using an electrical appliance, basic precautions should always be taken.

READ ALL INSTRUCTIONS BEFORE USING THIS PRODUCT

## **WARNING!**

To reduce the risk of fire, electrical shock, or injury:

- Use only as described in this manual.
- Do not attempt to repair or adjust any of the electrical or mechanical functions. Contact Customer Service for service information.
- Do not use outdoors or on wet surfaces.
- Do not allow to be used as a toy. Do not allow children around the unit.
- Do not handle appliance with wet hands.
- Do not allow foreign objects to enter the ventilation openings.
- Keep hair, clothing, fingers, and all parts of body away from openings.
- **Do not touch NCC bulb with bare hands.**

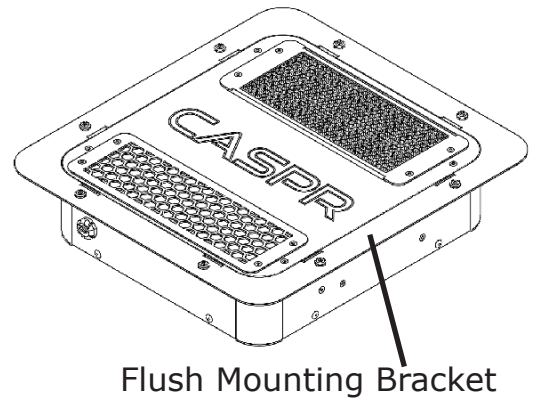
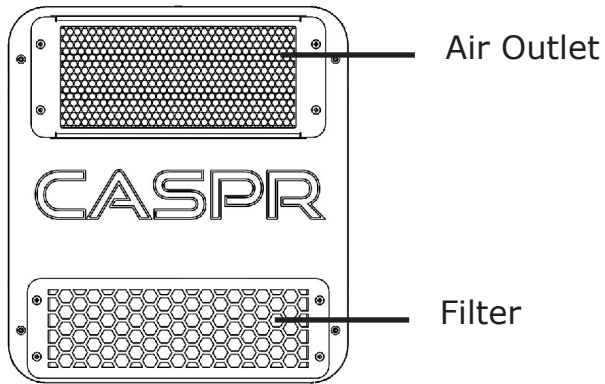
	 <b>WARNING</b>
	<p><b>WARNING!</b> - UV light in operation. Disconnect unit from power supply before servicing. Failure to follow warnings may result in severe eye damage.</p>

## Specifications

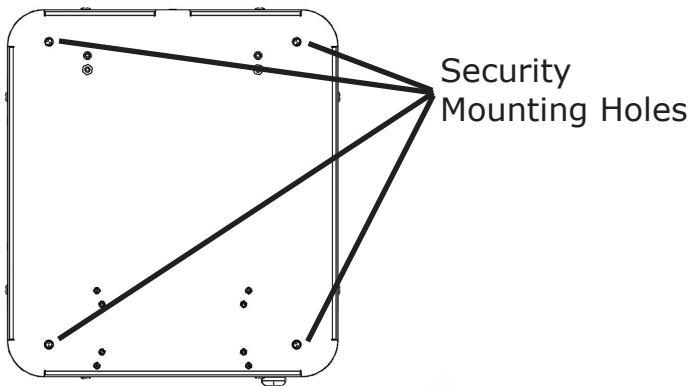
	TRANSIT 120V	TRANSIT 24V	TRANSIT 12V
Weight	4.0 lbs	4.0 lbs	4.0 lbs
Dimensions (WxLxH)	9" x 10" x 2.6" 11" x 12" x 2.6" (flush mount)	9" x 10" x 2.6" 11" x 12" x 2.6" (flush mount)	9" x 10" x 2.6" 11" x 12" x 2.6" (flush mount)
Electrical Input	100-240VAC 50/60Hz 1.8A 277VAC 50/60Hz 0.9A (277VAC - North America only)	19-36VDC 1.5A	9-36VDC 1.5A
Amp. Draw	AC 0.02A	DC 0.57A	DC 0.65A
Air flow (CFM)	17.9	17.9	17.9
Noise (dBA)	48	48	48
Min/Max Operating Temp	14°- 140°F	14°- 140°F	14°- 140°F

# Unit Diagrams

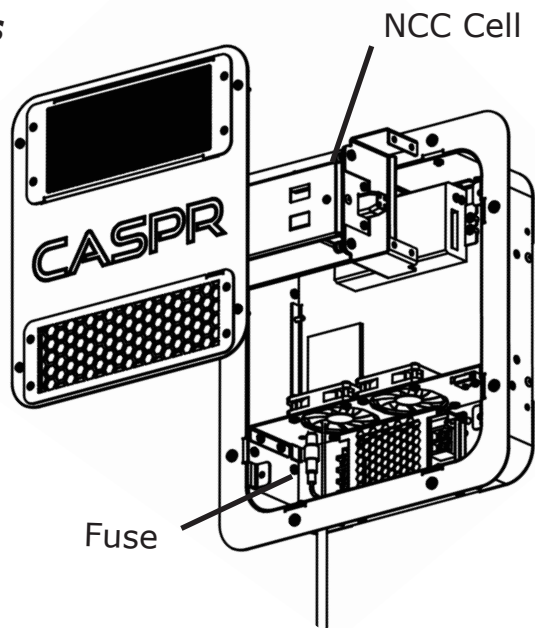
## Unit Front



## Unit Back



## Unit Internals



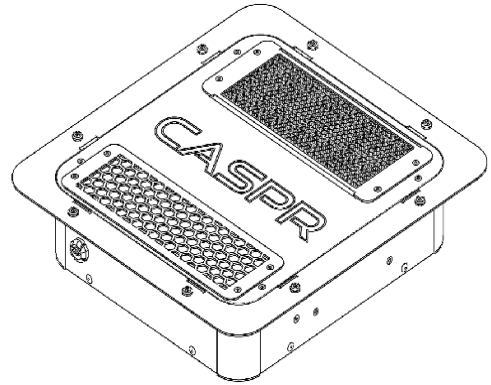
# Installation

Before installation, identify wiring routes in order to select the most optimal location for this install.

**All electrical wiring should be done by a licensed technician or mechanic that has experience locating and wiring low voltage.**

## Flush Mount Installation

1. Cut hole where the unit will be inset into the wall. Unit is 9" x 10" x 2.6".
2. Unscrew the bracket from the main unit. Then move the bracket from the bottom of the unit and screw it back on the top of the unit so the bracket is now flush with the top lid as seen in the image.
3. Place unit into the cut hole.
4. Use the 8 self-tapping screws to attach the unit to the surface.
5. Connect wiring into the 24VAC or the 12VAC power source. Refer to wiring guidelines below.



## Surface Mount Installation

1. Identify where the unit will be placed / Drill hole for wire (If needed)
2. Attach the unit flush to the surface of the vehicle by using 8 screws to secure the unit in place. Connect wiring into the 24VAC or 12 VAC power sources. Refer to wiring guidelines below.

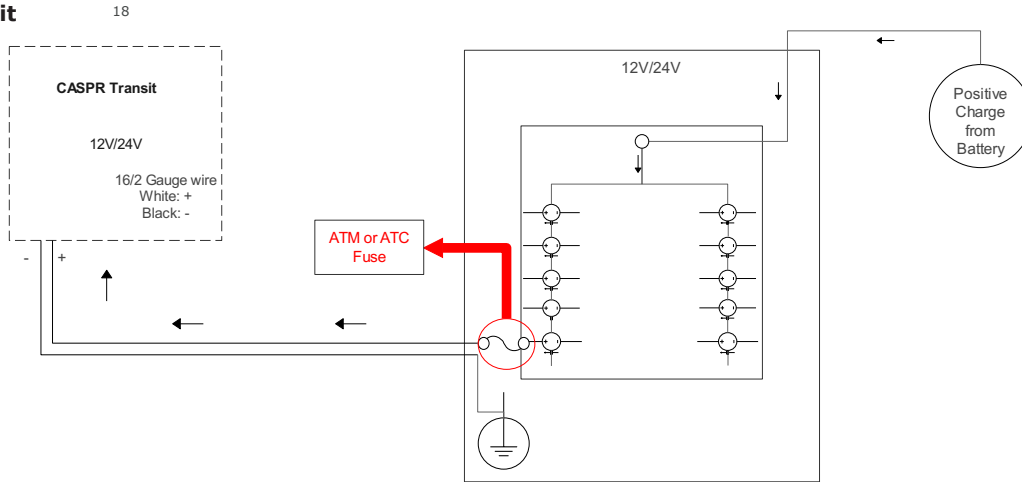
## Wiring Guidelines

- **WHEN INSTALLING ON A BUS, PAY SPECIAL ATTENTION TO FEDERAL, STATE, AND LOCAL CODES. WHEN APPLICABLE, THE SYSTEM MUST BE WIRED THROUGH THE SAFETY NOISE SUPPRESSION RELAY SYSTEM.**
- **Wire the system through a relay system to prevent the CASPR unit/s from draining the battery when not in operation.**
- **A fuse must be installed at the source of the power supply** when installing a CASPR Transit unit onto a vehicle. **Always use fuses specific to your vehicle's specifications.** Use the fuses table below to install the appropriate fuse.
- Vehicles are subject to vibration; when running wire throughout the vehicle, be sure to **include slack in all wiring.**
- 18 gauge stranded wire should always be used.

# Fuses

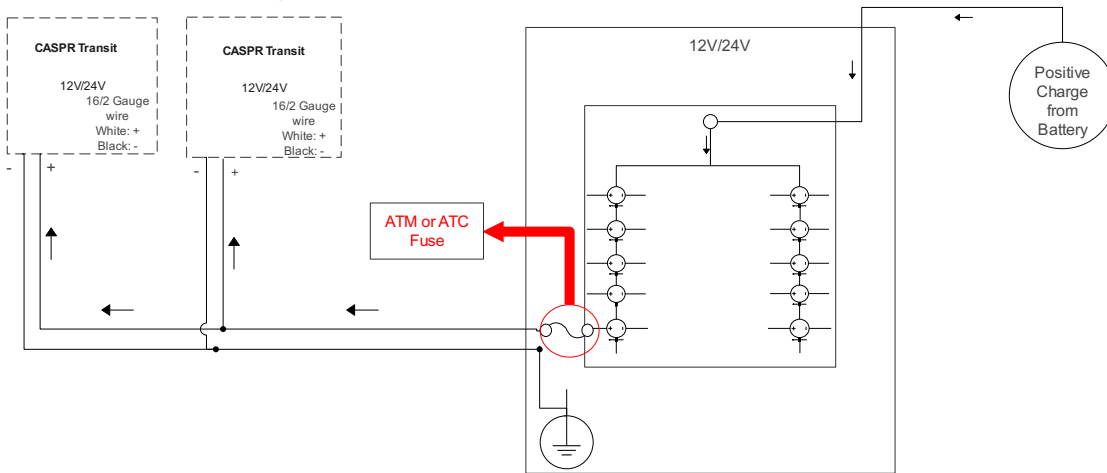
Unit	1 Unit	2 Units Wired in Parallel	3 Units Wired in Parallel
TRANSIT 12V	3 Amps	6 Amps	9 Amps
TRANSIT 24V	3 Amps	6 Amps	9 Amps

## 1 Unit



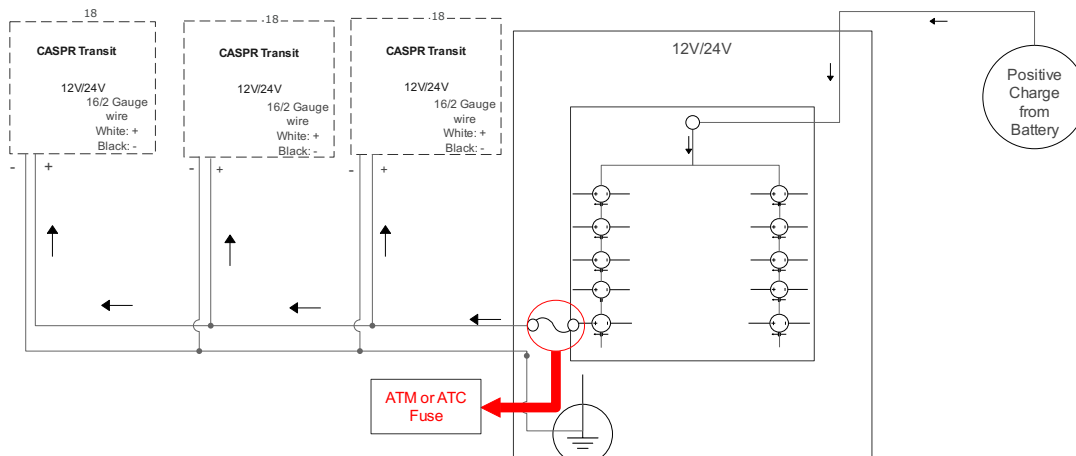
**ATTENTION: FAILURE TO USE AN IN-LINE FUSE CAN INCREASE THE CHANCES OF A THERMAL EVENT. WIRE THROUGH A RELAY SYSTEM TO PREVENT THE BATTERY FROM DRAINING.**

## 2 Units Wired in Parallel



**ATTENTION: FAILURE TO USE AN IN-LINE FUSE CAN INCREASE THE CHANCES OF A THERMAL EVENT. WIRE THROUGH A RELAY SYSTEM TO PREVENT THE BATTERY FROM DRAINING.**

## 3 Units Wired in Parallel



**ATTENTION: FAILURE TO USE AN IN-LINE FUSE CAN INCREASE THE CHANCES OF A THERMAL EVENT. WIRE THROUGH A RELAY SYSTEM TO PREVENT THE BATTERY FROM DRAINING.**

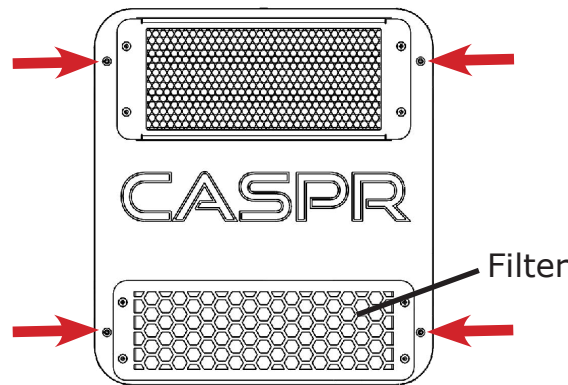
# Filter Cleaning and Replacement

We recommend cleaning the filter every 90 days, or when noticeably contaminated, by vacuuming the filter through the front filter cover. The filter should be replaced every 6 months. Service should only be performed by a qualified technician.

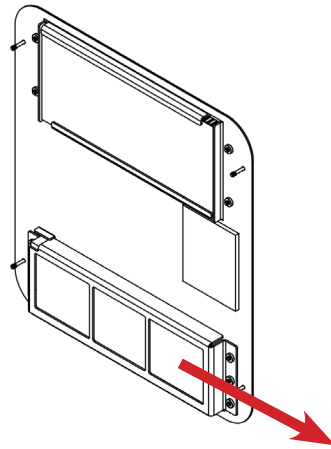


**WARNING:** Never service the unit while it is connected to a power source. Electrical shock or injury may occur. Make sure the power switch is turned OFF and the unit is unplugged prior to handling.

1. Disconnect unit from power source.
2. Remove the front cover from the unit by unscrewing the four Phillips head captive screws.



3. Remove the used filter by pinching the filter material and sliding it out of the bracket on the back side of the front cover.



4. Replace with the new filter.
5. Reattach the front cover.
6. Reconnect unit to power source.

**NOTE:** The filter may alternatively be replaced via the front filter cover using a T-8 tamper-proof torx bit.

## Cleaning the Unit

The unit will need to be cleaned occasionally, We recommend wiping it down each time you replace or clean the filter.



**WARNING:** Never service the unit while it is connected to a power source. Electrical shock or injury may occur. Make sure the power switch is turned OFF and the unit is unplugged prior to handling.

1. Disconnect unit from power source.
2. Remove the front cover from the unit.
3. Wipe all internals, other than the NCC cell and bulb, down with a damp cloth (Fan, ballast, covers, etc).
4. Reattach the front cover of the unit.
5. Reconnect unit to power source.

## NCC Cell Replacement

Your CASPR Transit unit requires replacement of the NCC cells and bulbs every 18-24 months, even if the bulb appears to be operating normally.

Service should only be performed by a qualified HVAC technician. Make sure there is no power going to the unit prior to handling.

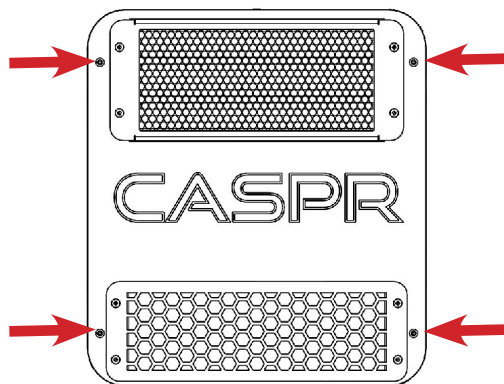


**WARNING:** Never service the unit while it is connected to a power source. Electrical shock or injury may occur.

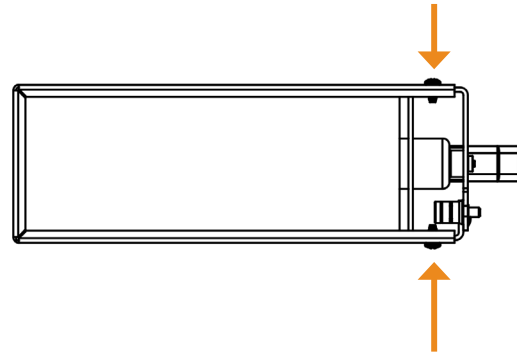
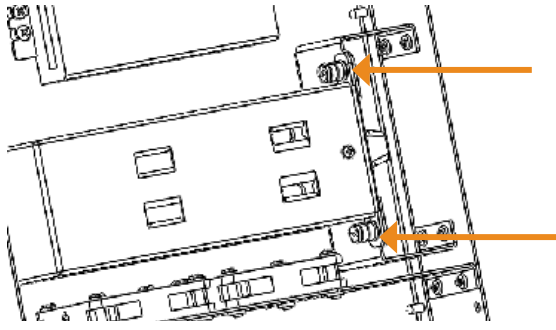


**WARNING:** Please do not throw a used NCC Cell in the garbage. See "Cell Disposal" on page 8 for more information.

1. Disconnect unit from power source.
2. Remove the Front Cover from the unit by unscrewing the four phillips head captive screws.

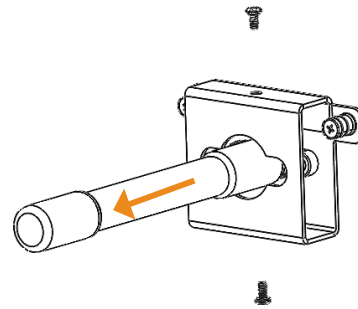
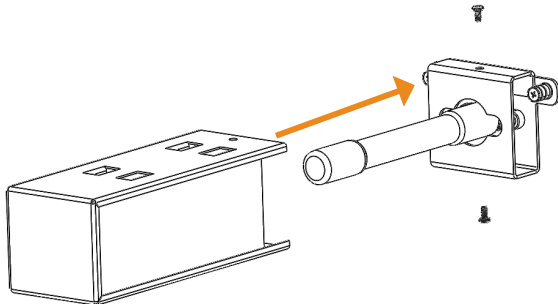






3. Unscrew the mounting bracket assembly holding the NCC Cell in place and lift it up out of the case.

4. Unscrewing the two screws located on the sides of the cell housing.



5. Separate the Cell housing from the mounting bracket

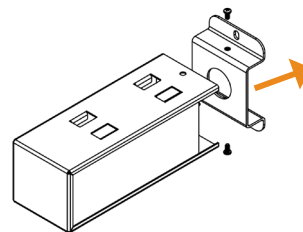
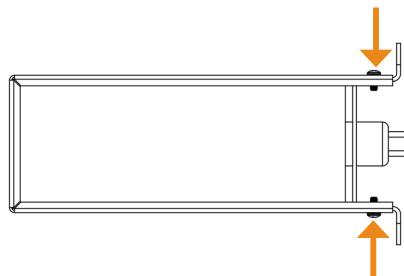
6. Disconnect the bulb.

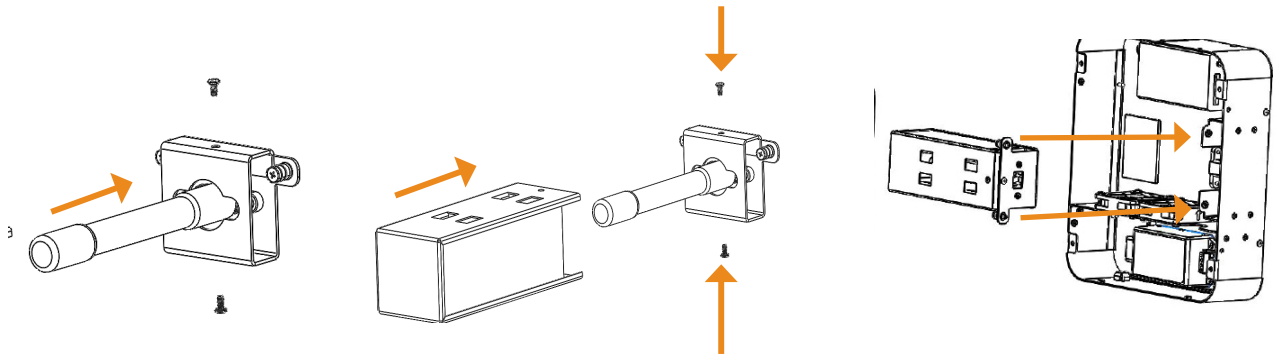
*Dispose of the used bulb appropriately. Do NOT throw it in the trash. See "Cell Disposal" on page 8 for more information.*

- 7. Remove the new Cell Assembly from the packaging box.
- 8. Carefully remove the new bulb from new cell housing.

**DO NOT touch the bulb with bare hands.**

- 9. Before replacing the new cell assembly into the transit, you must first remove the support bracket that came with the replacement cell. Detach the metal bracket on the end of the new replacement cell housing by unscrewing the two screws located on the sides. You will no longer need the support bracket from the new replacement cell once it has been removed.





10. Connect the new Bulb to socket in the mounting Bracket Assembly.

11. Attach the new Cell Housing to the mounting bracket with the previously removed screws (2).

12. Install the Assembly onto the TRANSIT unit and secure with the two thumb screws.

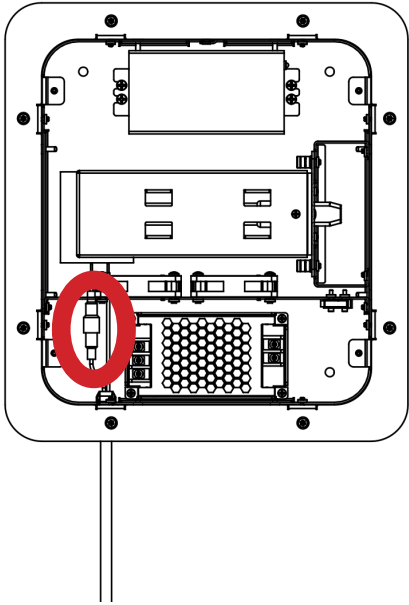
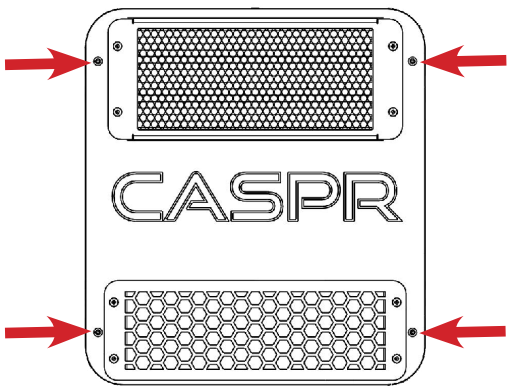
13. Reattach the Cover.

14. Reconnect unit to power source.

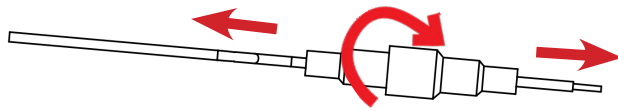
## Fuse Replacement

If you find the unit is powered off, even after activating the interlock switch and changing the bulb, you may need to replace the internal fuse. This can be done using the instructions that follow. If this still does not work, remember to check any in-line fuses that may have been added during install (page 6).

1. Disconnect unit from power source.
2. Remove the Front Cover from the unit by unscrewing the four phillips head captive screws and locate the fuse.



3. Unscrew the two plastic pieces folding the fuse in place.



4. Replace the fuse with a new 3amp 250 VAC 5mm x 20mm fuse.
5. Screw the two plastic fuse covers together to complete the circuit.
6. Reattach the Cover.

## Cell Disposal

Do not throw a used NCC Cell in the garbage. The special germicidal UVC bulb used in the unit contains a very small amount of mercury. Dispose of the spent NCC Cell and UV Lamp at your local recycling center or by local regulations. To learn more, visit [www.lamprecycle.org](http://www.lamprecycle.org).

## Troubleshooting

If your NCC Cell or CASPR TRANSIT fan does not turn on, check to ensure a secure connection. If secure, but the fan is not on, it may need to be replaced. If the connection is secure but the cell does not light up, the NCC cell or ballast may need to be replaced. When conducting maintenance ensure that the cover is properly installed so that the interlock switch is activated. If still, an issue persists, try replacing the 3 amp internal fuse using the instructions described above. If none of the prescribed steps work, please contact your CASPR authorized distributor with your serial number.

## Replacement parts (purchased separately):

NCC Cell (Ozone-Free) Item #CELL-HV-5-001-AP-TR

Filter Item #CA450769011

Fuse Item # CA450756-3

# Warranty Information

LIMITED 3 YEAR WARRANTY ON CASPR Technologies UNITS AND 1 YEAR WARRANTY ON CASPR Technologies REPLACEMENT PARTS

Customer should not repackage and ship the CASPR Transit unit due to possibility of irreparable damage. For warranty service, please contact your CASPR Technologies Distributor for the address of the nearest service center, email warranty@casprgroup.com call Customer Service at 844-717-8819.

## WHAT IS COVERED BY THIS WARRANTY

We warrant the CASPR Transit to the Customer, subject to the conditions below, against defects in workmanship or material, provided that the products are returned to a service location within three (3) years from the date of purchase.

## INSTALLATION AND MAINTENANCE REQUIREMENTS

This warranty is expressly conditioned upon proper installation, operation, cleaning and maintenance, all in accordance with the Owner's Manual. Failure to meet any of these requirements will void this warranty. Servicing of your CASPR Transit by parties other than our authorized representatives and/or using parts other than genuine parts will also void this warranty.

## HOW TO OBTAIN WARRANTY SERVICE

Customer must contact their CASPR Technologies Distributor and provide proof of purchase within the above time periods. We will repair or replace and return the product, without charge and within a reasonable period of time, subject to the conditions herein, if its examination shall disclose any part to be defective in workmanship or material. If we, in our discretion, are unable to repair the product after a reasonable number of attempts, we will provide either a refund of the purchase price or a replacement unit, at the company's option.

## WHAT IS NOT COVERED BY THIS WARRANTY

Ordinary wear and tear shall not be considered a defect in workmanship or material. These warranties do not apply to filters nor for loss or damage caused by accident, fire, abuse, misuse, improper installation, leaking, modification, misapplication, or by any repairs other than those provided by our authorized Service Center. This warranty is non-transferable.

## MISSING SERIAL NUMBERS AND UNAUTHORIZED CHANNELS

If a valid serial number is missing from the product, the warranty will be voided. CASPR Technologies products are authorized for sale through CASPR Technologies Distributors only. Warranties are voided if a product is purchased through unauthorized channels; this includes websites that are not authorized to use CASPR Technologies's trademarked names, images and logos as well as Internet auction sites (e.g. eBay and craigslist). To confirm warranty coverage prior to purchasing a product, contact CASPR Technologies at 844-717-8819 with the serial number located on the back of the unit.

EXCLUSION OF OTHER WARRANTIES AND CONDITIONS EXCEPT AS PROVIDED HEREIN, WE MAKE NO REPRESENTATION OR WARRANTY OF ANY KIND. ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, ARE HEREBY EXPRESSLY DISCLAIMED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

LIMITATION OF LIABILITY FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES

WE SHALL NOT IN ANY CASE BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM BREACH OF EXPRESSED OR IMPLIED WARRANTIES, CONDITIONS, GUARANTEES OR REPRESENTATIONS, BREACH OF CONTRACT, NEGLIGENCE OR ANY OTHER LEGAL THEORY. Such excluded damages include, but are not limited to, loss of profits or revenue, and loss of the use of the products, and any loss caused by leaks or other water damage.

## FOR U.S. APPLICATION ONLY

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on warranties, or on remedies for breach. In such states, the above limitations may not apply to you.

## FOR CANADIAN APPLICATION ONLY

Exclusion of Subsequent Owners: Except as otherwise required by applicable legislation, this warranty is not transferable. This warranty gives you specific legal rights and you may also have other rights which vary from province to province. Some provinces and territories do not allow limitations on warranties, or on remedies for breach. In such provinces or territories, the above limitations may not apply to you. If any provision of this warranty or part thereof is held by a court of competent jurisdiction to be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions or parts thereof will not in any way be affected or impaired within the jurisdiction of that court. This entire warranty shall continue to be valid, legal and enforceable in any jurisdiction where a similar determination has not been made.

This warranty is provided by:

CASPR Technologies, Inc.  
4505 Excel Parkway, #600  
Addison, TX 75001

## SERVICE

Every effort is made to ensure customers receive an up-to-date instructions manual on the use of our products; however, from time to time, modifications to our products may without notice make the information contained herein subject to alteration. For the latest information, please visit our website.



[WWW.CASPRTECH.COM](http://WWW.CASPRTECH.COM)

4505 EXCEL PKWY SUITE 600,  
ADDISON, TX 75001  
(844) 717-8819