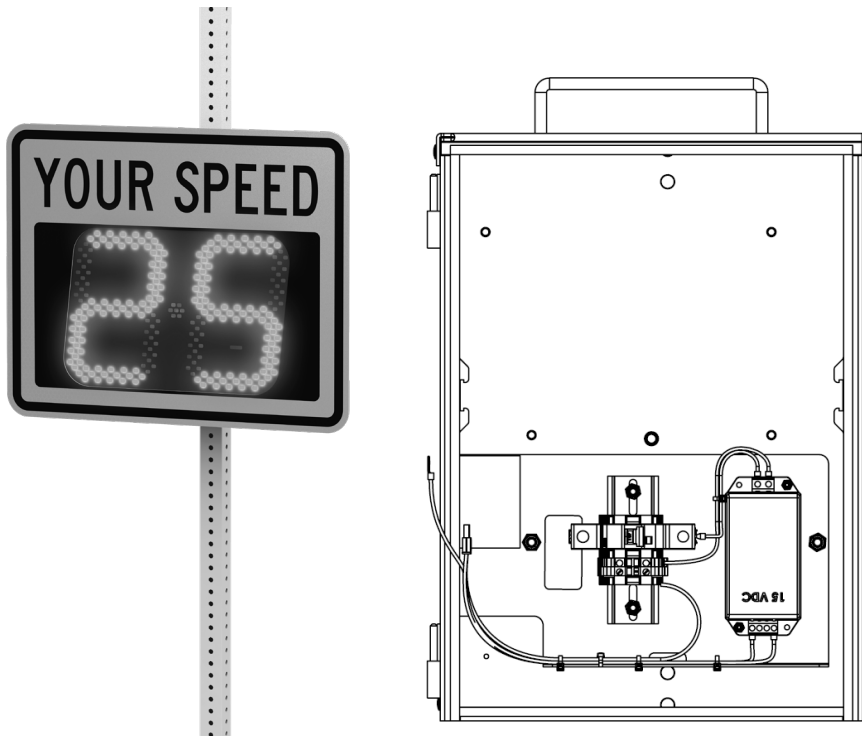




SpeedCheck®

AC-DC POWER SUPPLY REPLACEMENT GUIDE

For the AC-powered SPEEDCHECK-12



90064_REPLACEMENT-GUIDE_SPEEDCHECK-12-AC-Power-Supply_RevA

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1.0 Warnings and Precautions

The following symbols indicate important safety warnings and precautions throughout this guide:



WARNING indicates that serious bodily harm or death may result from failure to adhere to the precautions.



CAUTION indicates that damage to equipment may result if the instructions are not followed.



NOTE suggests optimal conditions and provides additional information.

1.1 Warranty Disclaimer

This manual will familiarize you with the features, operation standards and installation of Carmanah's SPEEDCHECK-12 AC-DC power supply. Failure to comply with the use, storage, maintenance, installation or placement instructions detailed in this manual could void the warranty.

1.2 Standards

Perform all installation, wiring, grounding and maintenance in conformance with local building and electrical codes. Adherence to the National Electrical Code (NEC) is mandatory to comply with any certification markings. Non-adherence to code may void the warranty.

1.3 Safety and Usage Precautions



Batteries are shipped fully charged. Use extreme caution when handling the batteries as they can generate hazardous short-circuit currents. Remove all jewelry (bracelets, metal-strap watches, etc.) before entering the cabinet.



Solar panels produce DC electricity when exposed to light and can therefore produce an electrical shock or burn. To render solar panels inoperative, remove them from sunlight or fully cover their front surface with an opaque material.



Before lifting any heavy or bulky equipment, ensure the load is secured so moving parts do not shift, and that it can be lifted as far as needed without back strain or loss of grip. Installation may require more than one person.



Ensure the equipment is not powered during installation and wiring of the system.



Recheck all completed wiring for proper polarity prior to energizing the system.



Changes or modifications to Carmanah equipment not expressly approved by Carmanah could void both the user's authority to operate the equipment and the warranty.



Product can have sharp edges. Accidental movement of hinged components can cause injury.



This guide is specific to the SPEEDCHECK-12 replacement AC-DC power supply installation and is not a replacement for the complete SPEEDCHECK-12 product user manual.

Visit support.carmanah.com to download the complete product user manual.

2.0 System Components

The SPEEDCHECK-12 AC-DC power supply consists of the following items:

1. Power supply, AC-DC converter (1)



3.0 Tools and Materials Required

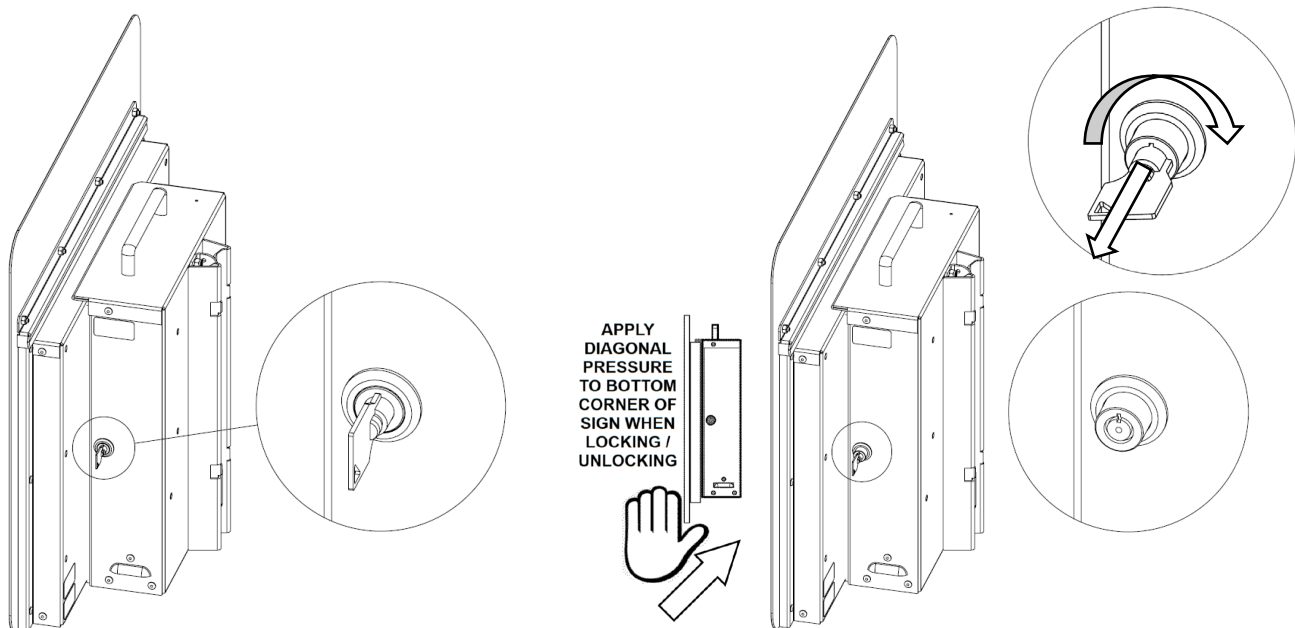
The following tools and materials may be required to install the AC-DC power supply into your SPEEDCHECK-12 system:

1. Small flat bladed screwdriver
2. Socket set

4.0 Installation

4.1 Opening Rear Enclosure

1. To open SPEEDCHECK-12, insert included key into lock and rotate clockwise.
2. Apply diagonal pressure to the bottom right corner of the sign face then PULL on the key.
3. Once unlocked, the key can be removed.



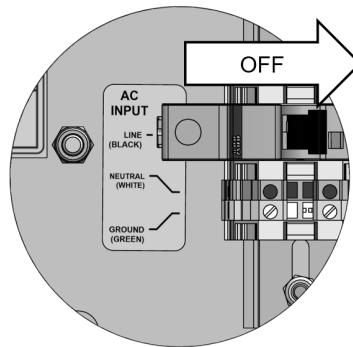
4. Swing the display enclosure away from the rear enclosure.

4.2 Removing AC-DC Power Supply

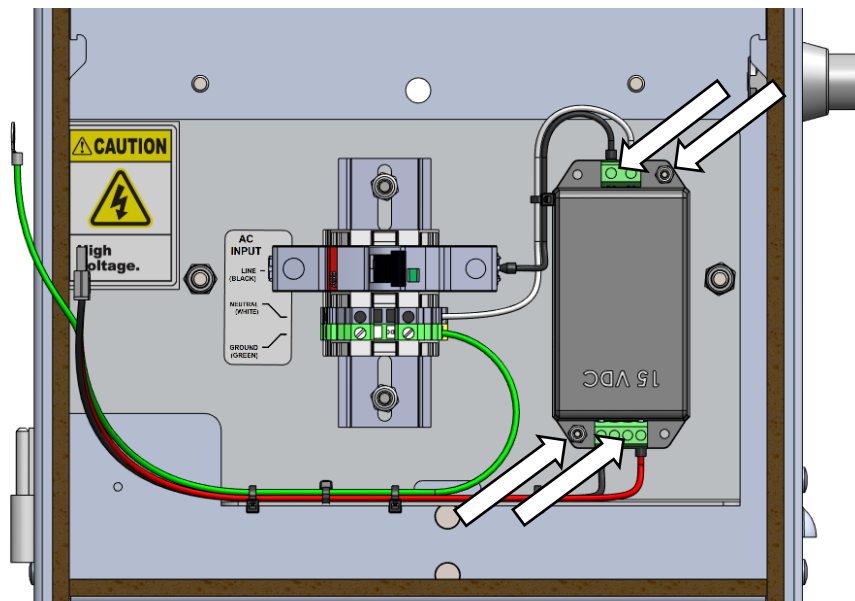


Live AC power will be present. Only qualified personnel should carry out the following replacement.

1. Disconnect power to the system by switching off the breaker (to the right). Confirm no power is feeding the SPEEDCHECK-12 before moving forward.



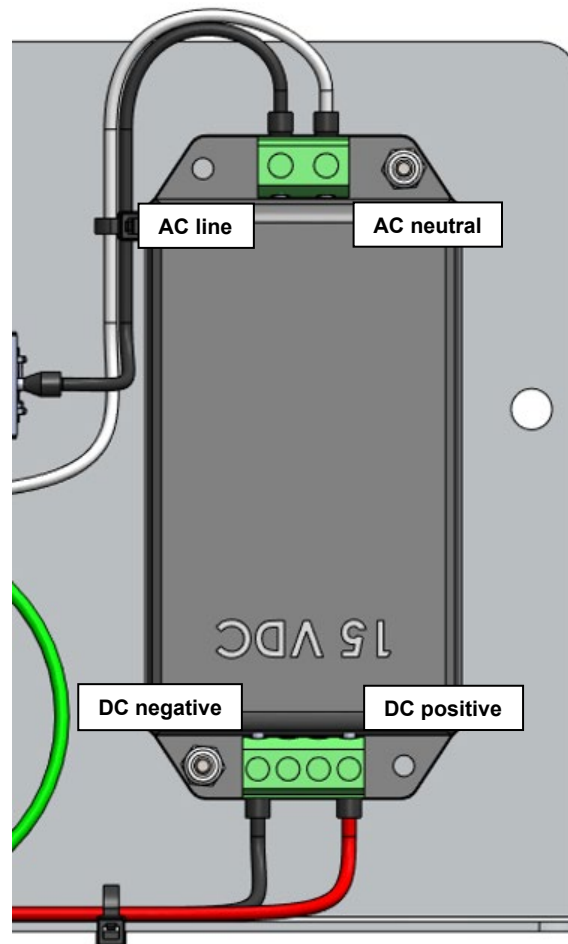
2. Remove the AC input wires (black and white) and DC output wires (black and red) from the power supply.
3. Remove the two nuts and remove the power supply.

**NOTE**

It may be easier to remove the display enclosure while working on the system. With the breaker switched off, disconnect all 2-pin/4-pin connections at the display enclosure bracket, lift the display enclosure off of the hinges and set aside. Reinstall the display enclosure and connections when completed with AC-DC power supply installation in [Section 4.3](#).

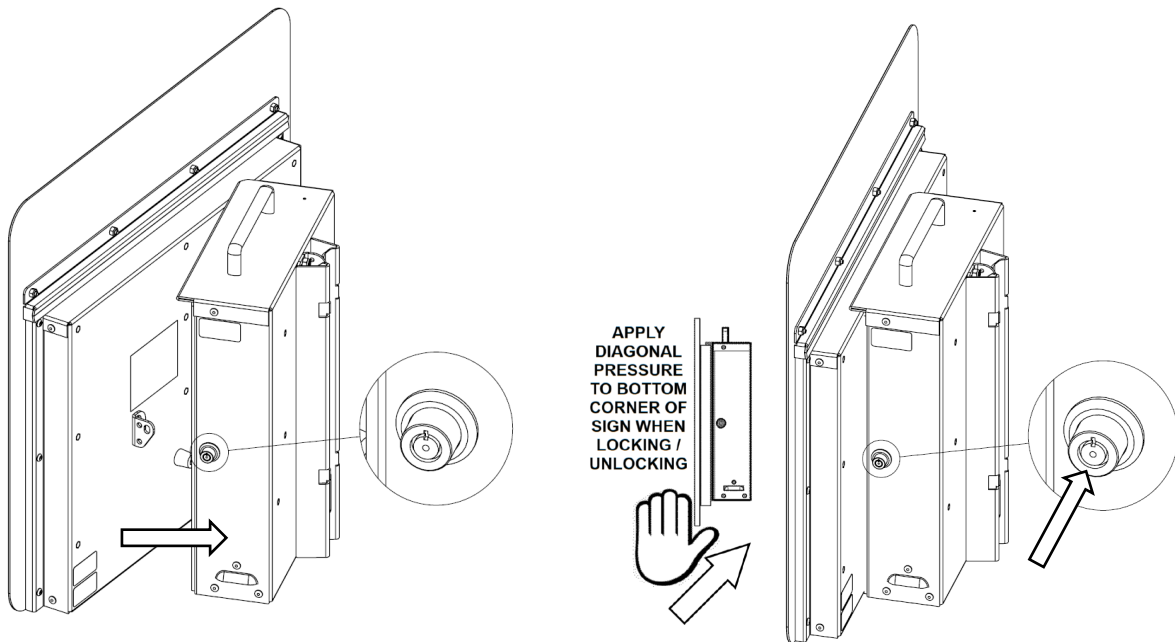
4.3 Installing AC-DC Power Supply

1. Orient the replacement power supply with the DC output facing down (4 position terminal) and install it onto the bracket.
2. Secure the power supply with the two nuts from [Section 4.2](#).
3. Reconnect the AC input and DC output wires to the power supply:
 - a. AC line (AC/L) = black
 - b. AC neutral (AC/N) = white
 - c. DC negative (-V) = black
 - d. DC positive (+V) = red



4.4 System Reassembly

1. Reconnect the power to the system by switching on the breaker (to the left).
2. To close, push the display enclosure against the rear enclosure and then apply diagonal pressure in the bottom right corner of the sign face. Once fully closed then PUSH the lock to secure in place





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