

Start Defender

Installation Instructions

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Table of Contents

Introduction	2
Installation	3
1 Location	3
2 Connector	3
3 Connector Disassembly	3
4 Ground Connection	3
5 Mounting	4
External Relay Control	4
6 Specifications	4
7 Functioning	5

Introduction

Welcome to the official Installation Manual for the **StartDefender**, a state-of-the-art theft-deterrent system for the 2018–2023 Dodge Durango with a Hemi engine.

This manual provides step-by-step instructions for the installation of the **StartDefender**, enhancing your vehicle's security by preventing unauthorized engine starts. Intended for certified technicians as well as vehicle owners, this guide includes procedures and troubleshooting tips to facilitate a seamless installation into your vehicle. Please read this manual thoroughly before beginning the installation process.

The Operation Manual is also included with your purchase and assumes that the **StartDefender** has been correctly installed in the engine bay as outlined in the Instruction Manual. Please complete the installation of **StartDefender** before proceeding to the Operation Manual.

• WARNING

DISCLAIMER: The StartDefender theft deterrent device is designed to deter theft and enhance vehicle security. However, no security device is 100% effective against all forms of theft or unauthorized access.

The manufacturer and seller make no guarantees that this device will prevent theft, damage, or loss of the vehicle or its contents. Users are advised to follow all installation and usage instructions, maintain the device in good working condition, and employ additional security measures as necessary.

The manufacturer and seller shall not be liable for any direct, indirect, incidental, or consequential damage arising from the use or failure of this device. By using this product, the user acknowledges and accepts these limitations and assumes all risks associated with vehicle security.

Installation

1 Location



StartDefender is installed between the inline junction connector that connects the main engine harness to the body harness of the vehicle. This connector is located along the frame rail on the passenger side of the vehicle.

2 Connector



The rear portion of the connector is mounted to the bracket with a fir tree push mount. If you have a normally aspirated vehicle, this connector is easily accessible without the removal of any additional parts.

If you have a Supercharged vehicle, you may want to remove the ECU and ECU harness connectors to rotate them out of the way.

Disassemble as much as necessary to gain adequate access for your needs. Consult the Factory Service Manual for guidance if you are not familiar with working on a late-model Dodge Durango.

3 Connector Disassembly

Push the connector lock button, rotate the connector bar up, and gently pull the connector apart. You may have to wiggle the connector a bit to get it to release. Do not force it and take your time.

The forward portion of the connector is fixed mounted and does not need to be disconnected from the mount.

4 Ground Connection



Loosen the ground connection under the connector and remove the nut. Rotate the ground connector so that the wire is towards the rear and passenger side of the vehicle. There is adequate length and flexibility on this ground connection to rotate it approximately 120 degrees counterclockwise.

Install the **StartDefender** ground connector on the same stud and reinstall the nut to hold down both electrical connectors.



Install the small rubber cap on the ground stud that was just tightened. The rubber cap will protect the **StartDefender** from any unnecessary wear from contact with the stud.

5 Mounting

The **StartDefender** is installed between the inline junction connection. You will want to add some additional support to the connector with the included fir tree zip tie hanger.



- Slide the fir tree zip tie over the **StartDefender** before connecting the device, and snug up the connections. Do not fully tighten the zip tie connection points.
- Coil the extra ground wire length under the **StartDefender** and keep it away from the exhaust manifold.
- Install the **StartDefender** between the connectors and latch each side so they are locked.
- Push the fir tree into the bracket and arrange the zip tie towards the firewall end of the **StartDefender**. Snug up the zip tie connections and clip off the excess.
- Route the External Relay Control wire as necessary and zip tie it securely.

External Relay Control

6 Specifications

StartDefender supports an optional external alarm output. In particular, the alarm's 12V output can be used to trigger a relay (high side) to drive a larger siren. If you choose to drive the siren directly, it must have a **maximum rating of 1A**.



Small 12V 100dB alarm sirens are readily available from numerous retailers. These devices generally draw approximately 15mA and can be connected directly to the external relay control and mounted under the shock tower brace.

WARNING

Installing an external device that does not meet the specified requirements may cause StartDefender to fail and will not be covered under warranty. It is strongly suggested to consult an expert on the installation of the device.

Below is the wiring pinout for the two installation options (position numbers are indicated on the connector body).



Figure 5: Connector Mating

Position	Note
1	12V Relay Command
2	GND

Table 2: Connector Pinout

7 Functioning

The **External Relay Control** option can be activated or deactivated in the configuration menu (see Section 3). **External Relay Control** will activate if the hood is opened while **StartDefender** is locked. If the hood is not closed within 5 seconds, the alarm will be triggered.

To deactivate the alarm, enter the correct sequence as you would for a normal **StartDefender** unlock procedure.