### **INSTALLATION GUIDE**

SAFESTOP VEHICLE
ANTI-THEFT SYSTEM
SS0001
2007-2016
GM TRUCK, SUV, AND
EXPRESS VAN



STRONG | RELIABLE | SECURE

## SS0001 - 2016 - Current GM Truck, SUV, & Express Van

NOTE: WIRE COLORS & PIN #'S WILL DIFFER IF WORKING WITH A CHEVY EXPRESS VAN, SO TABLES 1 & 2 SHOULD BE CONSULTED DURING INSTALLATION.

#### I. Line Location

- A. Remove driver side kick panel and/or steering wheel column to allow for easy access.
- B. Locate ignition switch connector, typically located at the rear of the ignition key switch at the steering wheel column.
- C. Locate a constant 12V power supply that can handle a 10A circuit, but nothing greater. The main power line heading into the ignition connector should be used. It can be identified by a thicker gauge wire that has a constant 12V output. See Table 1.
- D. Locate an area on the vehicle chassis where the SS0001 will eventually have the ground wire attached. It is not recommended that the SS0001 ground wire be shared with any other component, so common ground wires should be avoided.
- E. Locate a brake light line that gives a 12V output when the brake is pressed. This can be found on the BCM under the kick panel. See Table 2.
- F. Locate the shift lock actuator line. This can be found on the BCM under the kick panel. See Table 2.
- G. The SS0001 provides an optional feature allowing the trunk release button to be disabled. If this feature is desired, then locate the trunk latch line that a gives 12V output when the trunk latch button is engaged. This can be found on the BCM under the kick panel. See Table 2.
- H. Once all of the aforementioned lines have been identified, disconnect the battery and wait 20 minutes for any stored capacitance to discharge.

### II. Line Cutting & Splicing

- A. Disconnect the 6-pin OEM ignition harness connector from the back of the ignition switch in the steering wheel column, and connect the SS0001 harness connectors into their corresponding OEM ignition harness connectors (Be aware that there is a red locking tab on the OEM and SS0001 connectors). If the OEM ignition connectors are different from the connectors on the SS0001 harness, go to page 5 and follow the directions for splicing the SS0001 unit into the ignition lines.
- B. Cut the shift lock actuator line, and strip both ends. Attach the YELLOW wire from the SS0001 SHIFT DISABLE harness to one end of the shift lock actuator line. Attach the YELLOW/BLACK wire from the SS0001 SHIFT DISABLE harness to the other end of the shift lock actuator line (Polarity/orientation is irrelevant for this circuit). See Figure 1.

- C. If the optional SS0001 trunk disable feature is going to be used, then cut the trunk latch actuator line and strip both ends. Attach the BLUE wire from the SS0001 TRUNK DISABLE harness to one end of the trunk latch actuator line. Attach the BLUE/WHITE wire from the SS0001 TRUNK DISABLE harness to the other end of the trunk latch actuator line (Polarity/ orientation is irrelevant for this circuit). See Figure 1.
- D. Splice the GREEN/WHITE wire from the SS0001 harness into the brake light line (T-tap). See Figure 1.
- E. Splice the RED wire from the SS0001 harness into the constant 12V ignition power supply (T-tap). See Figure 1.
- F. If there is a desire to use the optional SS0001 gunlock output wire, then simply attach the BROWN SS0001 wire to the gunlock timer input wire (see gunlock timer installation manual for details). If this feature is not needed, simply cap off the BROWN wire with heat shrink or another type of wire insulator. See Figure 1.
- G. Attach the BLACK wire from the SS0001 harness to the isolated vehicle chassis point. See Figure 1.

#### III. Testing

- A. Reconnect the battery.
- B. Test SS0001 for full functionality:
  - SS0001 unit test:
    - 1. Start vehicle.
    - 2. Turn SS0001 toggle switch on (red LED illuminated).
    - 3. Turn key to off and remove from ignition switch. Vehicle should keep running.
    - 4. Turn SS0001 toggle switch off (red LED not illuminated). Vehicle should shut down.
  - SS0001 brake pedal override:
    - 1. Start vehicle.
    - 2. Turn SS0001 toggle switch on (red LED illuminated).
    - 3. Turn key to off and remove from ignition switch. Vehicle should keep running.

- 4. Depress brake. Vehicle should shut down.
- SS0001 gun lock override:
  - 1. Start vehicle.
  - 2. Turn SS0001 toggle switch on (red LED illuminated).
  - 3. Activate momentary switch for gunlock. Gunlock should disengage for 8 seconds, before re-engaging.
  - 4. Turn key to off and remove from ignition switch, and immediately activate momentary switch for gunlock. Gunlock should disengage for 8 seconds, before reengaging. After that, the gunlock should not be able to disengage anymore until the key is reinserted back into the ignition.
- SS0001 trunk disable override:
  - 1. Start vehicle.
  - 2. Turn SS0001 toggle switch on (red LED illuminated).
  - 3. With keys in ignition, activate the trunk release latch. Trunk should release.
  - 4. Close trunk.
  - 5. Remove keys from ignition. While vehicle is still running, try activating the trunk release hatch. Trunk should not release.
- C. After successful test verification, it is recommended that the SS0001 module be mounted securely to a solid location in or around the steering column. A ¾" hole will need to be drilled in order to mount the SS0001 toggle switch, preferably in a location where the toggle switch will be in plain view on a cosmetically friendly surface. Harnesses should be coiled and secured away from any sharp metallic edges.

# **Direct Wiring Without Connector**

Chevrolet has occasionally introduced certain mid-year changes to their 2016 line of vehicles. One such change includes an alternate ignition connector that differs from the connector provided on the harness of the SS0001. If this issue is encountered, the installer should refer to figure 2 while following the proceeding steps:

- 1.) Locate the ignition harness underneath the steering wheel column.
- 2.) Pick a location further down along the ignition harness, away from the OEM ignition plugs, and strip away the cloth insulation to isolate the five ignition wires. Be sure to have heat shrink, electrical tape, or some other insulator on hand before beginning the hardwire process, as it will be necessary to isolate the lines later on in order to prevent short-circuits. See Figure 2.
- 3.) Take the SS0001 harness and cut off the connector with the red tab on it and strip all four of its wires.
- 4.) Leave the RED/BLU vehicle ignition line alone for now, as it will not be used yet.
- 5.) Cut the WHT/BLK wire in the vehicle ignition line, strip both ends, and attach the WHT/BLK wire from the SS0001 to the WHT/BLK ignition line that is heading towards the steering wheel. See Figure 2.
- 6.) Cut the WHT/VIO wire in the vehicle ignition line, strip both ends, and attach the GRY wire from the SS0001 to the WHT/VIO ignition line that is heading towards the steering wheel. See Figure 2.
- 7.) Cut the VIO/YEL wire in the vehicle ignition line, strip both ends, and attach the ORG wire from the SS0001 to the VIO/YEL ignition line that is heading towards the steering wheel. See Figure 2.
- 8.) Cut the VIO/BLK wire in the vehicle ignition line, strip both ends, and attach the YEL/WHT wire from the SS0001 to the VIO/BLK ignition line that is heading towards the steering wheel. See Figure 2.
- 9.) Now take the SS0001 harness and cut off the other, larger connector and strip all four of its wires.
- 10.) Take the other stripped end of the WHT/BLK vehicle ignition line heading towards the vehicle dash and attach it to the YEL wire from the SS0001. See Figure 2.
- 11.) Take the other stripped end of the WHT/VIO vehicle ignition line heading towards the vehicle dash and attach it to the GRY wire from the SS0001. See Figure 2.
- 12.) Take the other stripped end of the VIO/YEL vehicle ignition line heading towards the vehicle dash and attach it to the WHT wire from the SS0001. See Figure 2.
- 13.) Take the other stripped end of the VIO/BLK vehicle ignition line heading towards the vehicle dash and attach it to the GRN wire from the SS0001. See Figure 2.
- 14.) Make sure that all individual connections have been properly insulated and secured.
- 15.) Continue with the rest of the original instructions in the SS0001 manual regarding the connection of the other lines.

(Refer back to step II. Part B)

Figure 1

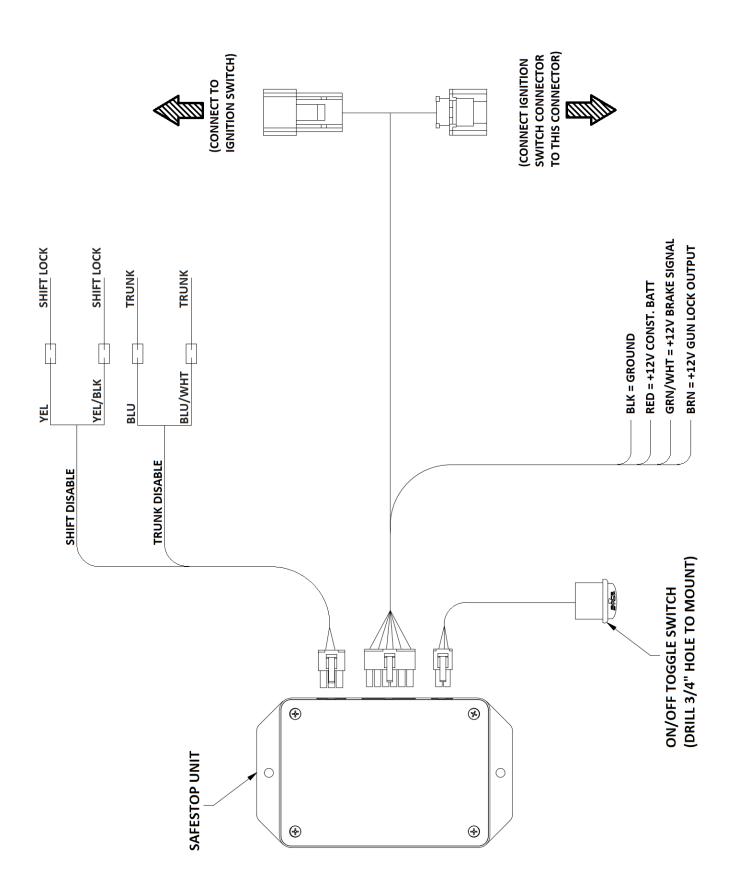


Figure 2

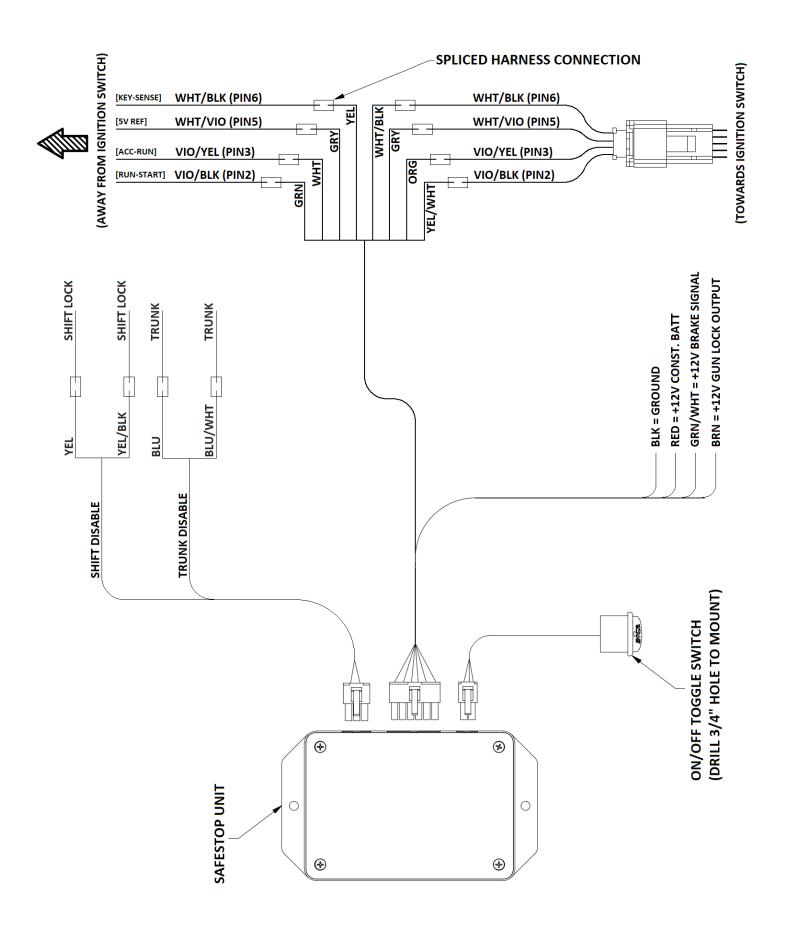


Table 1 Chevy Ignition

		Key-Sense		Accessory-Run		Run-Start		V-Ref		12V Constant Power	
Model	Year	Pin#	Wire Color	Pin#	Wire Color	Pin#	Wire Color	Pin#	Wire Color	Pin#	Wire Color
Tahoe	2007-2014	Plug & Play								4	RED/WHT
Tahoe	2015	Plug & Play								4	RED/BLU
Silverado	2007-2013	Plug & Play							4	RED/WHT	
Silverado	2014-2015	Plug & Play							4	RED/BLU	
Suburban	2007-2014	Plug & Play							4	RED/WHT	
Suburban	2015	Plug & Play							4	RED/BLU	
Express	2007	Plug & Play							В	RED/BLK	
Express	2008-2015	Plug & Play							4	RED/WHT	
Impala	2007-2016	Plug & Play							2	RED/WHT	
Caprice	2011-2013	Plug & Play							2	ORG/BLK	
Caprice	2014-2016	Plug & Play							2	RED/WHT	
Tahoe	2016-2017	6	WHT/BLK	3	VIO/YEL	2	VIO/BLK	5	WHT/VIO	4	RED/BLU
Silverado	2016-2017	6	WHT/BLK	3	VIO/YEL	2	VIO/BLK	5	WHT/VIO	4	RED/BLU
Suburban	2016-2017	6	WHT/BLK	3	VIO/YEL	2	VIO/BLK	5	WHT/VIO	4	RED/BLU
Express	2016-2017	5	PNK	3	BRN	2	PNK	6	WHT/VIO	4	RED/WHT

Table 2 Chevy BCM

		Shift	le	Trunk	е	Brake Light Signal				
Model	Year	<b>Connector Color</b>	Pin#	Wire Color	<b>Connector Color</b>	Pin#	Wire Color	<b>Connector Color</b>	Pin#	Wire Color
Tahoe	2007	GRN	26	TAN/WHT	YEL	1	YEL	BRN	5	LT BLU
Tahoe	2008-2014	GRN	26	TAN/WHT	GRY	1	YEL	BRN	5	LT BLU
Tahoe	2015	GRY	6	YEL/WHT	BRN	20	YEL	BLK	11	YEL/WHT
Tahoe	2016-2017	GRY	6	YEL/WHT	BRN	20	YEL	BLK	11	VIO/WHT
Silverado	2007-2013	GRN	26	TAN/WHT	-	-	-	BRN	5	LT BLU
Silverado	2014-2017	GRY	6	YEL/WHT	-	•	-	BLK	11	VIO/WHT
Suburban	2007-2014	GRN	26	TAN/WHT	GRY	1	YEL	BRN	5	LT BLU
Suburban	2015-2017	GRY	6	YEL/WHT	BRN	20	YEL	BLK	11	VIO/WHT
Express	2007	BLK	1	LT GRN/BLK	-	-	-	BLK	2	LT BLU
Express	2008-2017	GRN	26	TAN/WHT	-	-	-	PNK	2	LT BLU
Impala	2007-2013	GRN	26	DK GRN/WHT	GRY	2	LT BLU	BRN	5	LT BLU
Impala	2014-2017	GRY	6	YEL/WHT	PNK	5	VIO/GRY	BLK	11	VIO/WHT
Caprice	2011-2013	WHT	22	DK GRN/WHT	BLK	22	BRN	PNK	2	LT BLU
Caprice	2014-2017	GRY	6	VIO/BLK	BLK	8	GRY/YEL	BLK	11	VIO/WHT