Illuminated Doors sills for the GMC

Purpose	To provide instructions for the illuminated doors sill installation for the GMC
Scope	This procedure applies to installation of the GMC illuminated doors sill.

Table of Contents

Safety

- Care must be taken when handling the sharp items listed below such as the razor blades, cutters, sharp objects, and soldering irons.

Visual Icons

Symbol	Definition	Description
	Inspect/Verify	 The magnifying glass is used for inspection or verification to take place.
	Work Content	 The hammer is used to identify a process step where building of the product takes place.
	Safety Warning	 The yellow hazard triangle is used to identify process steps that involve potential safety hazards.
	Safety Action	 The red stop sign is used to identify process steps where a safety action must be performed before proceeding with the next operation.

Consumables and Equipment List

Consumables	Equipment
Alcohol 70%	Heat Gun
Acetone	Pliers
Rags	Wire Cutters
Scrub Pads	Torx 30
Electrical Tape	Solder Iron
WD-40 / Screw Loose	Multimeter
Solder	Crimper
Barrell Connector	Plastic Pry Bar

Procedure Detail

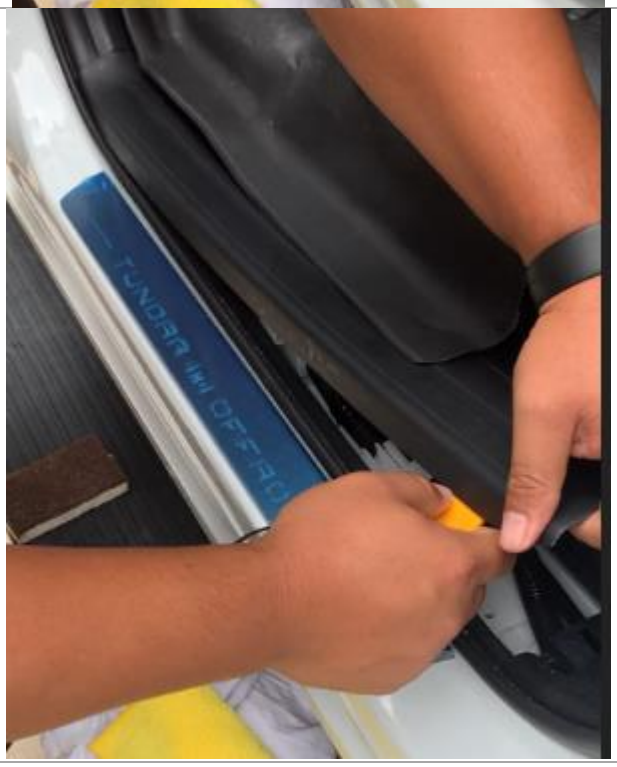
1. Removal of Door Scuff panel

Step	Instruction	Visual Aid (for reference only)
1.	Use plastic prying tools to pop the locking clips of the panel. Never use apply extreme pulling force to remove door scuff panel which may lead to broken locking clips. (skip to step 3 if you already removed all door panel)	
2.	Inspect all locking clips as the picture demonstrate a clean and ideal door scuff panel removal.	
3.	Use 50% or greater Isopropyl Alchohol to and towel or clean napkin to remove any dirt, debris, or residue on the metal surface of the door sills area.	

2. Placement of New Door Sill & Wire Routing

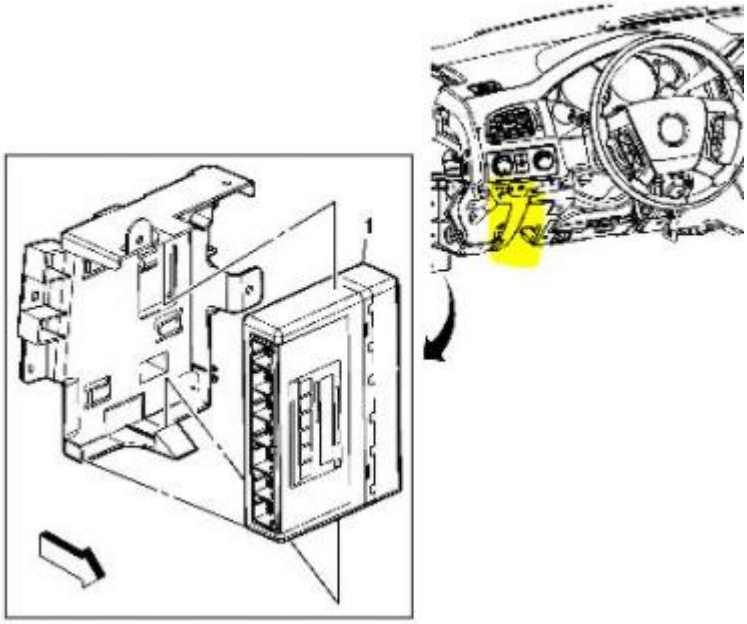
Step	Instruction	Visual Aid (for reference only)
1.	Verify location of new door sill and orient the position so that wire is tuck underneath the weather strip of the door. Note:	N/A

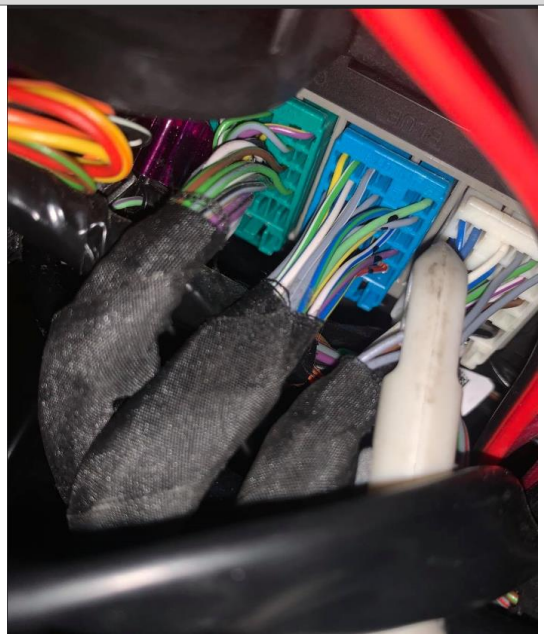
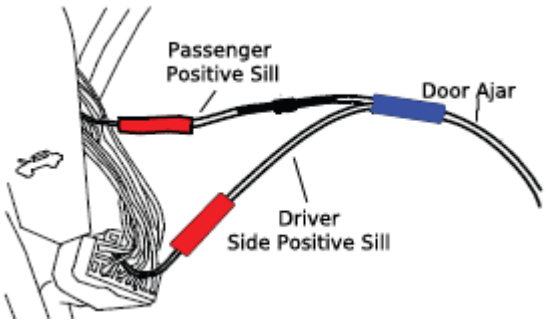
Step	Instruction	Visual Aid (for reference only)
	Do not remove door sills protective film until the new location is satisfy.	
2.	Remove ¼ of the film from the back of the door sill.	

Step	Instruction	Visual Aid (for reference only)
3.	Place the new custom door sill in the position as desired and peel back the film. Press firmly on the door sill to help adhere the double side tape to the door frame.	
4.	Next remove all plastic covers from door frame or sills with plastic pray tools.	

Step	Instruction	Visual Aid (for reference only)
5.	Once remove, pull the door weather strip up and tuck the custom door sill wires as shown in figure.	
6.	Place back the door weather strip after the wire is tucked between the weather strip.	

3. Determine Wire Connection

Step	Instruction	Visual Aid (for reference only)
7.	Find the Body Control Module (BCM) door ajar signal which is typically located underneath the dash. For 2020+ vehicle model, the gray solid wire color is typically on the 'Natural' connector of the BCM. For 2019 and below vehicle model, the gray solid wire color is typically found on the 'Gray' connector of the BCM. Use a multimeter and probe the signal from the gray solid wire and open and close the door to verify if the signal goes from 12 Volts DC to 0 Volts DC when the door is close or the Dome Light on the Off position. And 0 Volts DC to 12 Volts DC when the door is open/ajar. Some vehicle model will have courtesy light underneath the dash which could be line tap directly with the positive signal.	 **BCM Location**  **BCM Connector Name**  **Foot Area Courteousy Light**

Step	Instruction	Visual Aid (for reference only)
8.	Use a multimeter and probe the signal from the gray solid wire to the positive probe and negative probe to ground and open and close the door to verify if the signal goes from 12 Volts DC to 0 Volts DC when the door is close or the Dome Light on the Off position. And 0 Volts DC to 12 Volts DC when the door is open/ajar. Typically, the door signal have a 5 minute shut off delay. **Some vehicle model will have courtesy light underneath the dash which could be line tap directly with the positive signal. **	 
9.	Splice the BCM wire door ajar signal and route the positive wire from all the door sills to the front dash. *****Do not connect and reverse the polarity of the black and red wire, this will overload the door sills trigger and shorten the life span of the door sills. *****	

Step	Instruction	Visual Aid (for reference only)
10	Make a body chassis connector to ground all the negative signal from the door sills.	
11	Test the ON and OFF LED by opening the door of the vehicle or the Dome light ON and OFF position.	
12	Make sure insulated all wire splice with electrical tape or liquid tape to prevent any shorting of electrical connection. Put back the wire bundle as original and then place back on the door sills/trim once completed.	 

Professional Installation is highly recommended.