SBM650-B Seat Belt Minder
2009-2021 Chevrolet Silverado, GM Sierra
2009-2015 Chevy Express, GM Savannah
2026 Chevy Express, GM Savannah
All Engines



Introduction

The SBM650 Seat Belt Minder monitors the driver's seat belt buckle whenever the vehicle's ignition key is in Run. It provides two outputs which indicate the status of the drivers seat belt. One output is low true (ground) when the drivers seat belt is unbuckled OR the key is Off, and the other is low true (ground) when the drivers seat belt is buckled AND the key is in run. Either output can be connected to monitoring equipment as desired. These outputs are capable of sourcing/sinking 2 Amps max.

NOTE: As of FW 3.06, the module ships from InterMotive preset for 2026 Express/Savannah. To confirm which vehicle the module is currently configured for please see the Diagnostics section on the next page.

Installation Instructions

Disconnect vehicle battery before proceeding with installation



IMPORTANT—READ BEFORE INSTALLATION

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers.

Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

SBM650 Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the module. Locate the module in an area away from any high heat sources (engine heat, heater ducts, etc.) and where the harnessing won't be damaged by the tilt steering wheel, or Park Brake mechanism. Leave the module hanging down until installation and testing is completed so the diagnostic LEDs can be observed if needed. Do not mount the module until all wire harnesses are routed and secure.

Data Link Harness



1. Locate the vehicle OBDII Data Link Connector, mounted below the lower left dash panel.
2. Remove the OEM mounting screws for the OBDII connector. Plug the red connector from the Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure connectors together with the supplied wire tie.
3. Mount the Black pass-through connector from the Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the SBM650-B Data Link harness so that it does not hang below the lower dash panel.

10 Pin Connector



Pin 7 Dk Blue wire on the 10 pin connector will provide a ground output whenever the driver's seat belt is unbuckled or the key is in the Off position.

Pin 8, Orange wire on the 10 pin connector will provide a ground output whenever the driver's seat belt is buckled and the key is in the On position.

1. Extend the output wire as needed and connect to monitoring equipment.
2. Plug the 10 pin connector into the SBM650 module.

Vehicle Configuration



1. Turn the ignition switch to Run (engine off).
2. To cycle which vehicle the SBM module works with, enter diagnostic mode by shorting the Silver Test Pads on the module together. Ground pin 2 to cycle the vehicle configuration:

   2009-2015 Express/Savannah to 2026 Express/Savannah
   2026 Express/Savannah to 2015-2021 Silverado/Sierra
   2015-2021 Silverado/Sierra to 2009-2014 Silverado/Sierra
   2009-2014 Silverado/Sierra to 2009-2015 Express/Savannah

- If 2015-2021 Silverado/Sierra, LEDs 1 & 2 will be off
- If 2009-2014 Silverado/Sierra, LED 1 will be on
- If 2009-2015 Express/Savannah, LED 2 will be on
- If 2026 Express/Savannah, LEDs 1 & 2 will be on

Post Installation Test

1. Energize the SBM module by plugging in the 8-pin Data Link connector into the module.
2. Turn the ignition switch to Run (engine off).
3. Enter the module's Diagnostic Mode by shorting the two Test pads together on the module. This can be done carefully with a screwdriver or other metallic object. The LED's on the module will become active in Diagnostic Mode:

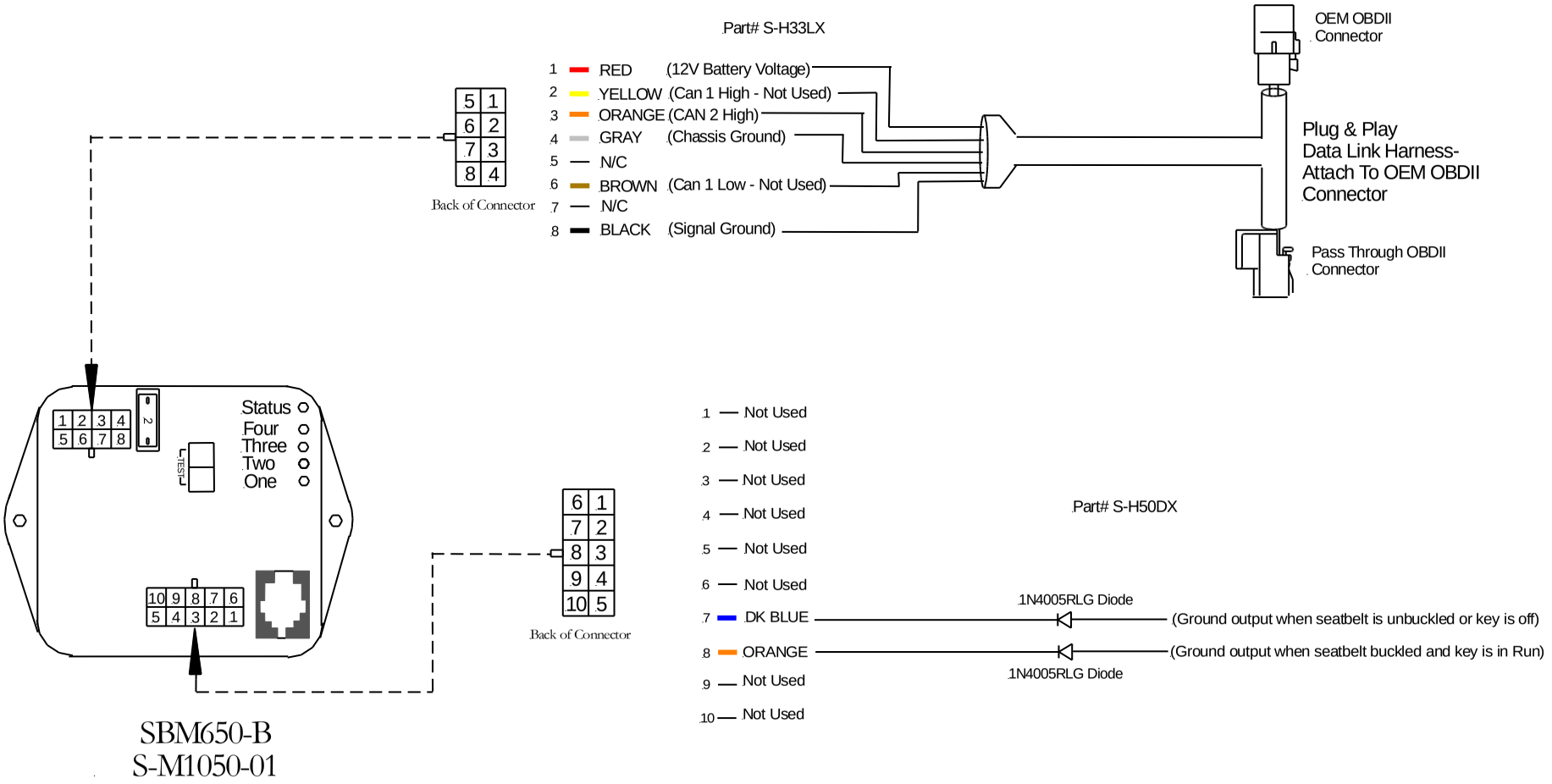


- The amber "Status" LED will be On when in Diagnostic Mode.
- LEDs 1 or 2 may be on to indicated vehicle. See previous section above.
- LED 3 will be On when the ignition switch is in Run/Crank.
- LED 4 will be On when the drivers seat belt is buckled.
- Cycling the ignition switch will exit Diagnostic Mode.

If the SBM fails to respond with the correct LEDs or the output pins do not track the seat belt buckle properly, verify the system has been installed in the correct make and model year vehicle listed at the top of page 1, and/or recheck wiring. If necessary, call Intermotive Technical Support 530-823-1048

SBM650 Module Mounting

When the module works properly as described above, route and secure the harnesses under the dash, ensuring they do not hang below the dash area. Mount the SBM module as described on page one using screws, Velcro, or double sided tape.



Submit product registration at www.intermotive.net

If the SBM650-B fails any step in the Post Installation Test, review the installation instructions and check all connections.
If necessary, call InterMotive Technical Support at (530) 823-1048.