Universal Steering Wheel Installation Guide

Applies to all custom steering wheels. Read fully before installation.

IMPORTANT DISCLAIMER

Professional installation is strongly recommended. This document is provided for general guidance only. Improper installation may result in airbag malfunction, vehicle damage, serious injury, or death. By installing or using this product, the installer and vehicle owner assume all responsibility and liability. The manufacturer and seller are not responsible for any damage, injury, or loss resulting from installation or use. You are responsible for performing your own due diligence and ensuring all work is completed safely and correctly.

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Airbag Information

Approximately 95% of custom steering wheel orders are delivered without an airbag. This is completely normal. Only orders that explicitly include a new airbag will arrive with one already installed. What you need to do depends on whether your order included a custom airbag cover:

- **If you did NOT order a custom airbag cover:** your original OEM airbag and OEM airbag cover must both be transferred over to the new custom steering wheel.
- **If you DID order a custom airbag cover:** your original OEM airbag must be transferred into the custom airbag cover — unless the custom cover already arrived with an airbag installed, in which case no transfer is needed.

Buttons & Controls

All factory buttons, switches, and control modules are transferred from the OEM steering wheel to the custom steering wheel unless otherwise specified.

Horn Troubleshooting

If the horn does not work, works inconsistently, or behaves unexpectedly, this is almost always caused by the horn contact plate within the airbag assembly needing adjustment — not a wiring issue.

- **Horn does not sound:** the screws that actuate the horn contact plate may need to be tightened slightly to ensure proper contact.
- **Horn sounds on its own / goes off while driving:** the horn contact screws are likely too tight and need to be loosened slightly.
- **Horn is too hard to press:** same fix — loosen the horn actuation screws slightly.

These adjustments are made to the screws holding the horn contact plate within the airbag or airbag cover assembly, not to the horn or wiring itself.

General Installation Notes

Always disconnect the vehicle battery before removing or installing the steering wheel. After installation, it is normal and recommended to perform a wheel alignment, as steering wheel removal may affect steering angle.

LED Function Overview (If Equipped)

Steering wheels equipped with LEDs include a Bluetooth OBD module. The OBD module must be plugged into the vehicle's OBD port for the LED to function. If the OBD module is unplugged, the LED will not operate.

LED Wiring Instructions (Critical)

Ground (Black Wire): The most important connection. Must be connected to a solid chassis ground or confirmed ground wire. Poor ground is the most common cause of LED failure.

Power (Red Wire): Requires a confirmed 12V power source. Use a voltmeter to identify power within the steering wheel wiring harness. All LED wiring is completed within the steering wheel harness—no fuse box routing is required in most vehicles.

How to Identify Power and Ground with a Voltmeter

Note: the red and black wires on your new steering wheel are consistent, but OEM harness wire colors are not standardized across makes and models and will often differ. Do not rely on wire color to match power and ground on the vehicle side — always confirm with a voltmeter.

Before connecting anything, test the OEM harness with the ignition fully **ON** (not accessory mode):

- Set your meter to DC voltage.
- Test each pin on the OEM connector against a known chassis ground (bare metal point).
- The wire reading approximately 12V is your power wire.
- The wire reading 0V that completes the circuit is your ground wire.
- If testing only in accessory mode, some grounds may read incorrectly (a floating ground). Always test with ignition fully ON for accurate readings.

Rare Power Supply Exception: In rare cases—typically older vehicles or certain exotic models—a 12V power source may not be available within the steering wheel harness. In these situations, power may need to be sourced through the clock spring and routed to the fuse box. This is uncommon and should only be performed by an experienced professional installer.

OBD Module Instructions

Plug the Bluetooth OBD module into the vehicle's OBD port after reconnecting the battery. If another OBD device is already installed, an OBD splitter may be used.

Battery Reconnection Procedure

Reconnect the vehicle battery with the OBD module unplugged. Wait approximately 30 seconds, then plug the OBD module into the OBD port. This reduces the risk of voltage spikes affecting the LED system.

Heated Steering Wheel (If Retained)

If heating is retained, the heating wiring will typically be bundled together as four wires (commonly two blue, one black, and one red). These are the heating wires.

To retain heating functionality, the OEM heating connector must be reused. Remove the connector from the original steering wheel and splice the heating wires from the custom steering wheel into the OEM connector accordingly. Some wheels may include a heating connector—if present, no splicing is required.

How to Identify the Heating Connector Wires

The OEM heating connector is separate from the airbag/horn connector and typically has its own 4-pin plug. Use a voltmeter with the ignition fully **ON** to identify each pin before splicing:

Important: The wires on your new custom steering wheel are consistently red, black, and two blue. The OEM vehicle harness is not color coded to match — wire colors on the factory side vary by make and model and will often be different colors entirely. Do not match wires by color. Always identify each OEM pin by testing with a voltmeter as described below, regardless of what color it is.

- Set your meter to DC voltage and test each pin on the OEM heating connector against a known chassis ground.
- The pin reading approximately 12V is your power wire (commonly red).
- The pin reading 0V that completes the circuit is your ground wire (commonly black).
- The remaining two pins (commonly both blue) are the heat-level regulation wires. These carry variable/pulsed voltage that changes with the heat setting, not a fixed 12V — this is how you can confirm they are the regulation pair rather than power or ground.
- **Quick gauge tip:** On both the custom wheel and your original wheel, the heating power and ground wires are a noticeably thicker gauge, while the two heat regulation wires are thinner. There are always four wires, so the two thick ones are your power and ground, and the two thin ones are your regulating pair. Use the wire thickness to narrow it down fast, then confirm with the voltmeter before splicing.
- As with the LED harness, test with ignition fully ON, not accessory mode, to avoid a false (floating) ground reading.

Match each identified wire to its function and splice the corresponding wires from the custom steering wheel into the OEM heating connector: power to power, ground to ground, and the two regulation wires to their matching pair.

Note: Testing or connecting this wiring requires disconnecting the OEM airbag connector. This will trigger your vehicle's SRS/airbag warning light on the dash—this is expected and normal, not a malfunction. The light can be cleared afterward with an inline airbag resistor (search "SRS simulator resistor" for your specific vehicle) or by having a shop clear the code via OBD2.

Hands-Off / Driver Monitoring Retention (If Equipped)

If hands-off or driver monitoring retention is specified, the order will include a separate cable module packaged in a small bag. This module must be installed to retain functionality. If it is not installed, the feature will not operate. No damage will occur.

Final Installation Checklist

- Battery disconnected during installation
- OEM airbag transferred (normal for most orders)
- OEM buttons transferred
- LED ground and power verified using voltmeter with ignition ON (if equipped)
- OBD module plugged in after battery reconnect (if equipped)
- Heating connector spliced or connected (if equipped)
- SRS/airbag light expected during wiring—cleared via resistor or OBD2 if desired
- Hands-off module installed if applicable
- Wheel alignment performed if needed

Note on Fitment: Carbon fiber is a rigid material, and our carbon fiber is thicker than most OEM plastic or composite wheels. Because of this, small modifications are sometimes needed during installation — such as minor drilling, adjusting screw placement, or trimming excess leather — to achieve a clean, tight fitment. This is normal for carbon fiber steering wheel installations and is not a sign of a manufacturing defect.