Wireless charging of mobile devices has become a popular option on a number of
2015 and newer GM passenger cars and light-duty trucks. It’s a convenient way for
drivers to charge a smartphone without the need for a charging cord.

GM models that may have an optional wireless charging system include 2015-2017
ATS, ATS-V, CTS, CTS-V, Escalade, Tahoe, Suburban, Yukon; 2016-2017 CT6, XTS,
Camaro, Cruze, Impala, Malibu, Volt, Silverado, Sierra; and 2017 LaCrosse, XT5,
Colorado, and Canyon.

The wireless charging process requires customers to have a compatible phone or a
compatible case equipped with an inductive coil. Wireless inductive charging uses an
electrically induced magnetic field to transfer energy
from the coil in the vehicle’s charging module to the coil in
the phone or its case.

**Compatible Devices**

An increasing number of smartphones have built-in wireless charging technology. Some smartphones require
a wireless-capable back cover or adapter. Customers should contact their phone retailer for information about
a wireless charging adapter/cover if it’s required for their phone.
An updated GM Wireless Charging Compatible Devices chart has recently been released. It provides an easy reference of compatible smartphones that feature built-in wireless charging or offer a wireless charging case.

**Charging a Device**

1. Verify the phone is properly equipped for wireless charging.
2. Turn on the vehicle or use Retained Accessory Power.
3. Remove all objects from the charging pocket or pad before attempting to charge the phone. Make sure there are not any coins, keys, cards, etc., trapped between the phone and the charging surface.
4. On a charging pad, align the back of the phone (screen facing up) against the flat surface of the charging pad. For a charging pocket, insert the phone (screen facing rearward) into the pocket so the phone screen faces the rubber bumps within the pocket. Proper positioning is critical; the charging coils of the charging surface and the device must line up in order for charging to take place.
5. When the phone is properly aligned, the phone charging icon (lightning bolt) will appear on the infotainment screen and, a few seconds later, the phone’s battery will start charging. If the phone does not charge, remove it from the pocket/pad, rotate it 180 degrees, wait for 3 seconds, and reposition it correctly.

**TIP:** The Colorado and Canyon do not display the phone charging icon on the infotainment screen. An LED indicator on the console is green when the phone is charging. If the LED is yellow, the phone is not charging and it should be repositioned correctly on the charging pad.

Not all phones will fit properly in all charger integrations. Phones that are longer than 150mm (approximately 6 inches) may have reduced performance or may not charge.

In addition, protective cases used on phones with built-in wireless charging capability may have reduced charging performance.

For vehicles with charging pads, rough roads and vehicle dynamics may result in the phone shifting out of position and charging to stop. If this happens, lift the phone for 3 seconds and place again on the pad with the correct alignment to re-establish charging.

If customers have any questions about wireless charging, direct them to the Owner Center websites for their respective brand.

- my.chevrolet.com
- my.buick.com
- my.gmc.com
- my.cadillac.com

**Testing using the EL-51755 Test Tool**

The EL-51755 Inductive Charging Test Tool can be used to verify charging system operation in a vehicle. There is no need to remove the rubber sleeve from the pocket or pad for testing.

When using the test tool with a charging pocket, position the edge of the tool (where the lanyard is attached) approximately 1/4-inch below the lip of the rubber sleeve surrounding the pocket. Keep the tool centered against the front wall to align the coil in the test tool with the coil in the vehicle module.

On a charging pad, align the tool against the alignment rib. For both the pad and pocket, ensure that the flat side (non-LED side) of the tool aligns against the flat charging surface.

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To verify the operation of the charging system, simply position the tool on the charging pad or in the charging pocket. If the tool’s wireless charging indicator is on, the charging system is operating properly and any charging concern may be caused by an incompatible or defective mobile device. If the charging indicator is off, continue diagnosis using the appropriate Service Information.

To complete the test successfully, the procedure may need to be repeated 5 times. Between each attempt, remove the tool and wait at least 3 seconds.

**TIP:** For any Mobile Device Wireless Charging System concerns, refer to circuit/system verification and testing in the appropriate Service Information. A scan tool cannot be used since the system is not connected to any control module. No DTCs or data parameters are available.

Thanks to Deepali Patel, Dan Lascu, Chinmaya Sindgikar, Gurpreet Behniwal, and Manju Bhat
Updated Battery Testing Guidelines

When testing or charging a battery in a vehicle that is in for service or is part of the dealership’s inventory, the EL-50313 Midtronics GR8 Battery Tester/Charger should be used in order to provide an accurate diagnosis about the battery’s state of health. Updated guidelines have been released recently in Bulletin #03-06-03-004 outlining the testing process and warranty claims.

Battery Testing

The EL-50313 Battery Tester/Charger must be used in diagnosing battery replacements and maintaining batteries on new vehicles in dealership inventory. The tool generates a 15-digit warranty code on a printed slip that captures critical information about the battery’s condition. Warranty codes are only generated when the battery test is set up for Diagnostic Mode and Out of Vehicle.

The code is required for all warranty claims for battery replacement to help in analyzing battery failures and improve product quality. The Warranty Support Center validates all warranty codes entered in the Battery Tester Code field for batteries replaced under warranty. Warranty claims for battery replacements with invalid test codes, incorrect test set-up, or the wrong battery type will not be authorized.

In addition, the EL-50313 Battery Tester/Charger must be using current software in order to generate a valid warranty code.

On vehicles with two batteries, including Stop/Start vehicles with auxiliary batteries, each battery must be electrically isolated and charged individually, which will result in two printouts.

When testing batteries:
1. Disconnect the battery from the vehicle.
2. Connect the EL-50313 tool cable clamps directly to the battery terminal posts. There is no need to remove the battery from the vehicle.
3. Select “Out of Vehicle” when setting up the test.
4. Select the proper battery type; Flooded, AGM, AUX12.
5. Enter the Cold Cranking Amps (CCA) as shown on the battery label. Refer to Bulletin #15-06-03-002D for 2015–2017 model year battery information.

Tool Software Updates

The EL-50313 Battery Tester/Charger requires periodic software updates. The latest software release is available through Global Connect by selecting “Essential Tools – Software Updates” on the Service page.

PDI Mode

When a new vehicle is received at the dealership, the battery must be checked as part of the Pre-Delivery Inspection (PDI). The EL-50313 Battery Tester/Charger has a charge algorithm identified on the tool as PDI Mode. In this mode, the battery condition is checked and then a fast charge is applied to the battery. This mode is designed to apply as much charge as safely possible in 20 minutes.

PDI Mode, which replaces the previous requirement of battery voltage check and charge, generates a printed slip that must be kept with the vehicle file as proof of maintenance. Checking the battery using PDI Mode also must be done at subsequent 30 day intervals while in dealer inventory and at the point of sale.

TIP: Vehicles with Stop/Start auxiliary batteries must be charged separately from the main battery while in dealership inventory storage. The auxiliary battery is not connected in a manner that will allow both batteries to be charged at the same time, so it must be charged individually, which will result in two printed slips.

Battery Charging

When a battery requires charging, be sure that the ignition is off before connecting or disconnecting the battery cables, the battery charger or the jumper cables. Failure to do so may damage the ECM/PCM or other electronic components.

When charging batteries:
1. Turn off the charger.
2. Ensure the battery terminal connections are clean and tight.
3. Connect the charger positive lead to the battery positive terminal on the battery or the remote jumper stud underhood.
4. Connect the negative charger lead to a solid engine ground or to a ground stud in the engine compartment that is connected directly to the battery negative terminal, but away from the battery. If the negative battery cable is disconnected and a terminal adapter is being used, connect directly to the adapter. Do not connect the negative charger lead to the housing of other vehicle electrical accessories or equipment. The action of the battery charger may damage this equipment.
5. Select “Charging,” “PDI” and “In Vehicle” when using the EL-50313 Battery Tester/Charger.
6. Select the proper battery type.
7. Enter the CCA as shown on the battery label. Refer to Bulletin #15-06-03-002D for 2015–2017 model year battery information.

Thanks to Gary McCraw
Sunroof Comfort Stop PositionEliminates Wind Buffeting

The 2017 CT6, XT5 and LaCrosse offer a double-sized power glass sunroof with a glass panel over the front row that opens and slides.

To help eliminate wind buffeting with the sunroof open at moderate speeds, approximately 37–52 mph, the sunroof express-opens to a comfort stop position when the Sunroof Slide switch, located on the overhead console, is pressed. The comfort stop position stops the glass panel about 3 inches short of full travel.

To open the sunroof fully, press the Sunroof Slide switch a second time. Wind buffeting will be more noticeable with the sunroof in the fully open position.

If customers bring in their vehicle for a wind buffeting concern with the sunroof, be sure to verify the sunroof is in the comfort stop position before performing any additional diagnosis.

Thanks to Tom Burlingame

Moving a Vehicle with Electronic Precision Shift and a Dead Battery

The Aisin AF50-8 8-speed automatic transmission (RPO MRC) in the new 2017 XT5 and LaCrosse features the first application of Electronic Precision Shift, which is a shift-by-wire system that enables the transmission range to be selected by electronic control rather than by mechanical means. There is not a physical link, cable or linkage, between the shifter and transmission.

Shifting out of Park

The shift lever has a Shift Interlock button on the side of the lever that is designed to prevent inadvertent shifting out of Park. To shift out of Park, the ignition must be on, the brake pedal applied, and the Shift Interlock button pressed. This shift lock control is always functional except in the case of a battery with a low charge (below 9 volts) or no charge.

If the vehicle has a dead battery or a battery with low voltage, charge or jump-start the battery in order to shift out of Park.

Default to Park

Under specified conditions, including when there is a loss of electrical power or the rear parking brake actuator fails, the Backup Park Lock function, also known as Default to Park, forces the transmission manual shaft to the Park position.

The electronic park brake will not disengage until the condition is corrected. The parking brake can be released manually by removing the rear parking brake actuator and inserting an appropriate hex tool past the splines of the parking brake actuator piston apply spindle in the brake caliper. Rotate the piston apply spindle clockwise to release the parking brake. After repairs, the park brake must be calibrated.

Thanks to Salvatore Canale
New Camaro Convertible One-bow Garnish Serviceability Changes

A change has been made in production recently to the 2017 Camaro Convertible one-bow garnish molding. This change was phased into Camaro Convertible production in October.

The original one-bow garnish design featured a clip on each side to retain the garnish to the top frame.

Convertible models now will use a M6 screw instead of the clip for better retention on each side of the one-bow garnish.

The seal retainer will have an access hole to allow for the new screw to pass through.

When servicing the convertible top, determine which design you’re working with. Pull back the weatherstrip around the one-bow garnish to see if it is attached by a clip or the new screw before attempting to remove the one-bow.

Service parts will transition to a one-bow design with a hole milled to allow for the screw. These parts also are compatible with vehicles attached with a clip design and the clip will still be retained in the same location.

Thanks to Ann Briedis