

2017 ACCESSORIES AND EQUIPMENT

Power Outlets - Bolt EV

SPECIFICATIONS

FASTENER SPECIFICATIONS

Reusable Threaded Fastener Tightening Specifications

Application	Specification
	Metric (English)
NOTE: <i>All fasteners listed in this table can be reused after removal.</i>	
Wireless Charging System Module Bracket Screw	1 N.m (9 lb in)

SCHEMATIC WIRING DIAGRAMS

CIGAR LIGHTER/POWER OUTLET WIRING SCHEMATICS

Accessory Power Receptacles and Wireless Charging (K4C)

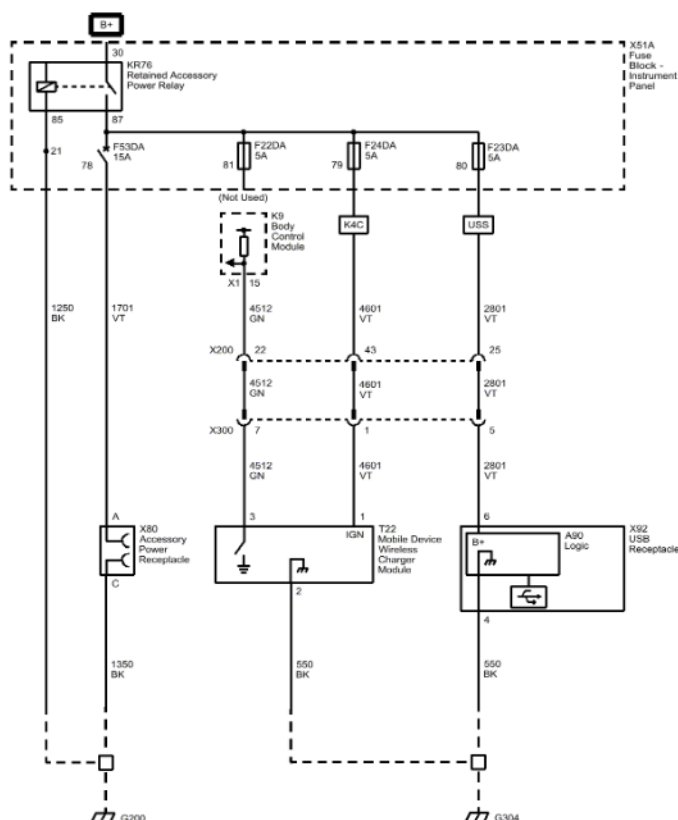


Fig. 1: Accessory Power Receptacles and Wireless Charging (K4C)

Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

SYMPTOMS - MOBILE DEVICE WIRELESS CHARGER

Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.

- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) provides an overview of each diagnostic category.
- Review the system description and operation in order to familiarize yourself with the system functions. Refer to [Mobile Device Wireless Charger Description and Operation](#).

Visual/Physical Inspection

- Inspect for aftermarket devices which can affect the operation of the power outlets. Refer to [Checking Aftermarket Accessories](#)
- Inspect the accessible system components or the visible system components for obvious damage or for obvious conditions which can cause the symptom.

Intermittent

Electrical connections or wiring may be the cause of intermittent conditions. Refer to [Testing for Intermittent Conditions and Poor Connections](#)

Symptom List

Refer to [Mobile Device Wireless Charger Malfunction \(with EL-51755\)](#) in order to diagnose the system.

SYMPTOMS - POWER OUTLETS

Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.
- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) provides an overview of each diagnostic category.

Visual/Physical Inspection

- Inspect for aftermarket devices which can affect the operation of the power outlets. Refer to [Checking Aftermarket Accessories](#).
- Inspect the accessible system components or the visible system components for obvious damage or for obvious conditions which can cause the symptom.

Intermittent

Electrical connections or wiring may be the cause of intermittent conditions. Refer to [Testing for Intermittent Conditions and Poor Connections](#).

Symptom List

Refer to [Power Outlet Receptacle Malfunction](#) in order to diagnose the system.

MOBILE DEVICE WIRELESS CHARGER MALFUNCTION (WITH EL-51755)

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	1	1	-	-
Signal	3	2	-	-
Ground	-	1	-	-
-cardiagn.com				

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
1. T22 Mobile Device Wireless Charger Module = Inoperative 2. Wireless Charging Indicator = Off 3. Wireless Charging Indicator = On				

Circuit/System Description

For an overview of the component/system, refer to: [Mobile Device Wireless Charger Description and Operation](#)

Circuit	Description
Ignition	Supplied from a relay.
Signal	The control module input circuit has an internal resistance connected to 12 V. When the switch is closed it will pull the signal voltage low.
Ground	Chassis Ground

Component	Description
T22 Mobile Device Wireless Charger Module	Inductive charging, also known as "wireless charging", uses a magnetic field to transfer energy between two objects. The wireless charger has an induction coil to create an alternating magnetic field. A second induction coil in a portable device takes power from the magnetic field and converts it back into electric current to charge the battery. The two induction coils in proximity work similar as an electrical transformer.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc. The control module also reads various switches and sensors and makes their values available via serial data.

The T22 Mobile Device Wireless Charger Module is controlled by an ignition operated relay and is operational when the ignition is in the Accessory or On position. When a wireless charging device is placed on the charging pad/pocket the charging of the device battery will start. The K9 Body Control Module detects the device battery is charging and sends a serial data message to the P17 Info Display Module which illuminates the charge indicator.

Diagnostic Aids

- Verify the mobile device can be charged with the proper wireless charging adapter. To check for phone or other device compatibility, refer to GM Total Connect website.
- Verify the charging pad/pocket is free from debris or any obstruction that may impede charging.
- The component T22 contains an internal temperature switch that will open if it exceeds 85Â°C (185Â°F).
- The ambient operating temperature is between -20 and 60Â°C (-4 and 140Â°F) for the charging system and between 0 and 35Â°C (32 and 95Â°F) for the mobile device. If the mobile device temperature exceeds 35Â°C (95Â°F) the mobile device may stop accepting a charge (this may vary with different mobile devices).
- Verify the mobile device is positioned correctly on the charging pad/pocket and there are no foreign objects between the mat and the mobile device. It may be necessary to move the device around slightly or rotate 180 degrees to properly align it on the charging pad/pocket until the device starts to charge. The use of a protective case may require more precise device placement to allow charging or may inhibit charging. Try removing the protective case.

- The mobile device may not charge if the charge mat is NOT completely flat or has an air gap which can be verified by a finger push at the target graphic located at the center of the mat. If the charge mat is NOT flat, replace the charge mat/rubber liner.
- While operating the vehicle in rough conditions, it is possible for the device to move out of position, repositioning of the device may be necessary.
- If the mobile device battery is fully charged, the charge indicator on the P17 Info Display Module may not illuminate.

Reference Information

Schematic Reference

Cigar Lighter/Power Outlet Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Mobile Device Wireless Charger Description and Operation

Electrical Information Reference

- [Circuit Testing](#)
- [Connector Repairs](#)
- [Testing for Intermittent Conditions and Poor Connections](#)
- [Wiring Repairs](#)

Special Tools

EL-51755 Inductive Charging Test Tool

Equivalent regional tools: [Special Tools](#)

Circuit/System Verification

WARNING: Remove all objects from the charging pad before charging your mobile device. Objects, such as coins, keys, rings, paper clips, or cards, between the phone and charging pad will become very hot. On the rare occasion that the charging system does not detect an object, and the object gets wedged between the phone and charger, remove the phone and allow the object to cool before removing it from the charging pad, to prevent burns.

1. Ignition - On / Vehicle - In Service Mode
2. Verify the charging pad is clear of any wireless device.

Verify the function: Wireless Charging Indicator = Off

- If the indicator is On

Refer to: Circuit/System Testing

- If the indicator is Off

NOTE: There is a charging coil located in the center of the Charging Pad/Pocket. The EL-51755 Inductive Charging Test Tool has a charging coil in the center of the tool. These coils must be aligned in order for the test tool to illuminate.

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

On a charging pad, align the EL-51755 Inductive Charging Test Tool against the alignment rib. In a pocket, insert the EL-51755 Inductive Charging Test Tool until it stops. For both the pad and pocket, ensure that the flat side (non-LED side) of the EL-51755 Inductive Charging Test Tool aligns against the flat charging surface.

3. Install the special tool: EL-51755 Inductive Charging Test Tool at Charging Pad/Pocket

Verify the function: Special Tools LED (Light Emitting Diode) = On

- If the special tool is Off

Refer to: Circuit/System Testing

- If the special tool is On

4. Verify the function: Wireless Charging Indicator = On

- If the indicator is Off

Refer to: Circuit/System Testing

- If the indicator is On

NOTE: The customer's device may not be compatible or is defective.

5. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: T22 Mobile Device Wireless Charger Module
3. Test for less than 10 Ω between the test points: Ground circuit terminal 2 & Ground
 - **If 10 Ω or greater**
 1. Disconnect ground terminal.
 2. Test for less than 2 Ω between the test points: Ground circuit terminal 2 at Component harness & The other end of the circuit at Ground terminal
 - If 2 Ω or greater - Repair the open/high resistance in the circuit.
 - If less than 2 Ω - Repair the open/high resistance in the ground connection.
 - **If less than 10 Ω**
4. Ignition - On / Vehicle - In Service Mode
5. Verify a test lamp turns On between the test points: Ignition circuit terminal 1 & Ground
 - **If the test lamp does not turn On and the circuit fuse is OK**
 1. Remove - Test Lamp
 2. Test for less than 2 Ω between the test points: Ignition circuit terminal 1 & Output terminal at Fuse
 - If 2 Ω or greater - Repair the open/high resistance in the circuit.
 - If less than 2 Ω Refer to: [Retained Accessory Power Malfunction](#)
 - **If the test lamp does not turn On and the circuit fuse is open**
 1. Remove - Test Lamp
 2. Test for infinite resistance between the test points: Ignition circuit terminal 1 & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: T22 Mobile Device Wireless Charger Module.

- **If the test lamp turns On**

6. Verify the function: Wireless Charging Indicator = Off

- **If the indicator is On**

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: K9 Body Control Module
3. Test for infinite resistance between the test points: Signal circuit terminal 3 at Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module

- **If the indicator is Off**

7. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 3 & Ground circuit terminal 2

8. Verify the function: Wireless Charging Indicator = On

- **If the indicator is Off**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
2. Disconnect the electrical connector: K9 Body Control Module
3. Ignition - On / Vehicle - In Service Mode
4. Test for less than 1 V between the test points: Signal circuit terminal 3 at Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
6. Test for less than 2 Ω between the test points: Signal circuit terminal 3 at Component harness & The other end of the circuit at Control module harness
 - If 2 Ω or greater - Repair the open/high resistance in the circuit.
 - If less than 2 Ω - Replace the component: K9 Body Control Module

- **If the indicator is On**

9. Test or replace the component: T22 Mobile Device Wireless Charger Module

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

[Wireless Charging System Module Replacement](#) - T22 Mobile Device Wireless Charger Module

POWER OUTLET RECEPTACLE MALFUNCTION

Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.
- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	1	1	-	-
Ground	-	1	-	-
1. Accessory Power Receptacle Malfunction				

Circuit/System Description

The vehicle is fitted with a 12 V accessory power receptacle. The accessory power outlets are controlled by an ignition operated relay. The accessory power receptacle is operational when Vehicle in Service Mode or Vehicle ON.

Diagnostic Aids

It may be helpful to discuss with the customer the usage of any device that may have drawn too much current and caused an open fuse.

Reference Information

Schematic Reference

Cigar Lighter/Power Outlet Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Outlets Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Circuit/System Verification

1. Vehicle in Service Mode, connect an appropriate device to the X80 Accessory Power Receptacle.
2. Verify the device is powered by the X80 Accessory Power Receptacle.
 - **If the device is not powered**
Refer to Circuit/System Testing
 - **If the device is powered**
3. All OK.

Circuit/System Testing

1. Vehicle OFF, disconnect the harness connector at the appropriate X80 Accessory Power Receptacle or E32 Cigarette Lighter Receptacle.
2. Test for less than 10 Ω between the ground circuit terminal C and ground.
 - **If greater than 10 Ω**
 1. Vehicle OFF.
 2. Test for less than 2 Ω in the ground circuit end to end.
 - If 2 Ω or greater, repair the open/high resistance in the circuit.
 - If less than 2 Ω , repair the open/high resistance in the ground connection.
 - **If less than 10 Ω**
3. Vehicle in Service Mode.
4. Verify that a test lamp illuminates between the control circuit terminal A and ground.
 - **If the test lamp does not illuminate and the circuit fuse/circuit breaker is good**
 1. Vehicle OFF.
 2. Test for less than 2 Ω in the control circuit end to end.
 - If greater than 2 Ω , repair the open/high resistance in the circuit.
 - If less than 2 Ω , verify the fuse/circuit breaker is not open and there is voltage at the fuse/circuit breaker. Refer to **Retained Accessory Power Malfunction**.
 - **If the test lamp does not illuminate and the circuit fuse/circuit breaker is open**
 1. Vehicle OFF.

2. Test for infinite resistance between the control circuit terminal A and ground.

- If less than infinite resistance, repair the short to ground on the circuit.
- If infinite resistance, replace the appropriate X80 Accessory Power Receptacle.

• **If the test lamp illuminates**

5. Replace the appropriate X80 Accessory Power Receptacle or E32 Cigarette Lighter Receptacle.

Repair Instructions

Perform the [Diagnostic Repair Verification](#) after completing the repair.

Accessory Power Receptacle Replacement

USB RECEPTACLE MALFUNCTION

Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.
- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	1	1	-	-
Ground	-	1	-	-
1. USB Receptacle Malfunction				

Circuit/System Description

The vehicle is fitted with USB charge port receptacles which are used only for charging mobile devices. The USB receptacles are controlled by an ignition operated relay and are operational when the ignition is turned to either the On or the Accessories positions.

Reference Information

Schematic Reference

Cigar Lighter/Power Outlet Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Outlets Description and Operation

Electrical Information Reference

- [Circuit Testing](#)
- [Connector Repairs](#)
- [Testing for Intermittent Conditions and Poor Connections](#)
- [Wiring Repairs](#)

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the X92 USB Receptacle. It may take up to 2 min for all vehicle systems to power down.

2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.

- **If greater than 10 Ω**

1. Ignition OFF.
2. Test for less than 2 Ω in the ground circuit end to end.
 - If 2 Ω or greater, repair the open/high resistance in the circuit.
 - If less than 2 Ω , repair the open/high resistance in the ground connection.
- **If less than 10 Ω**
3. Ignition ON.
4. Verify that a test lamp illuminates between the control circuit terminal 6 and ground.
 - **If the test lamp does not illuminate and the circuit fuse is good**
 1. Ignition OFF.
 2. Test for less than 2 Ω in the control circuit end to end.
 - If greater than 2 Ω , repair the open/high resistance in the circuit.
 - If less than 2 Ω , verify the fuse is not open and there is voltage at the fuse. Refer to [Retained Accessory Power Malfunction](#).
 - **If the test lamp does not illuminate and the circuit fuse is open**
 1. Ignition OFF.
 2. Test for infinite resistance between the control circuit terminal 6 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the X92 USB Receptacle.
 - **If the test lamp illuminates**
5. Test or replace the X92 USB Receptacle.

Repair Instructions

Perform the [Diagnostic Repair Verification](#) after completing the repair.

[Dual Charge Only Receptacle Replacement.](#)

REPAIR INSTRUCTIONS

WIRELESS CHARGING SYSTEM MODULE REPLACEMENT

Removal Procedure

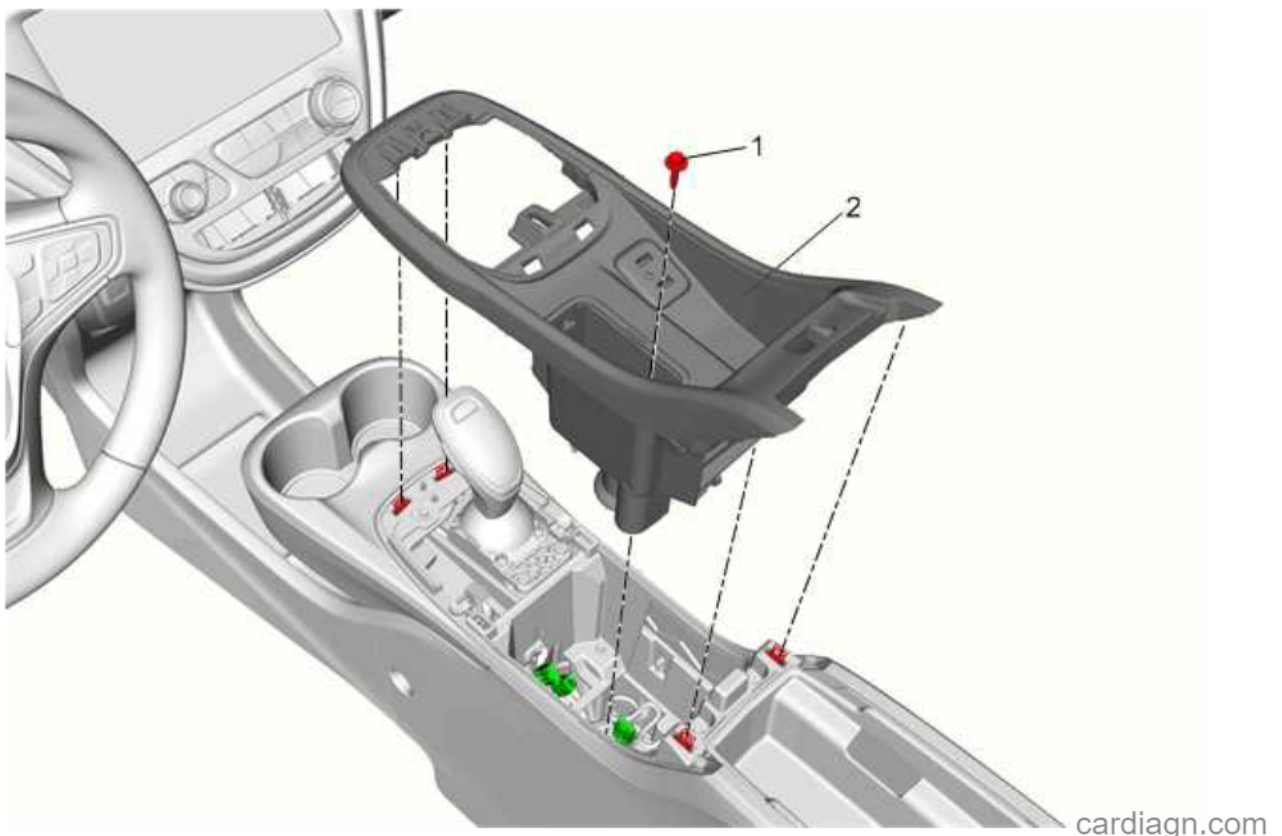


Fig. 2: Rear Floor Console Stowage Tray
Courtesy of GENERAL MOTORS COMPANY

1. Rear Floor Console Stowage Tray (2) - Remove - **Rear Floor Console Stowage Tray Replacement (without K4C)** **Rear Floor Console Stowage Tray Replacement (with K4C)**

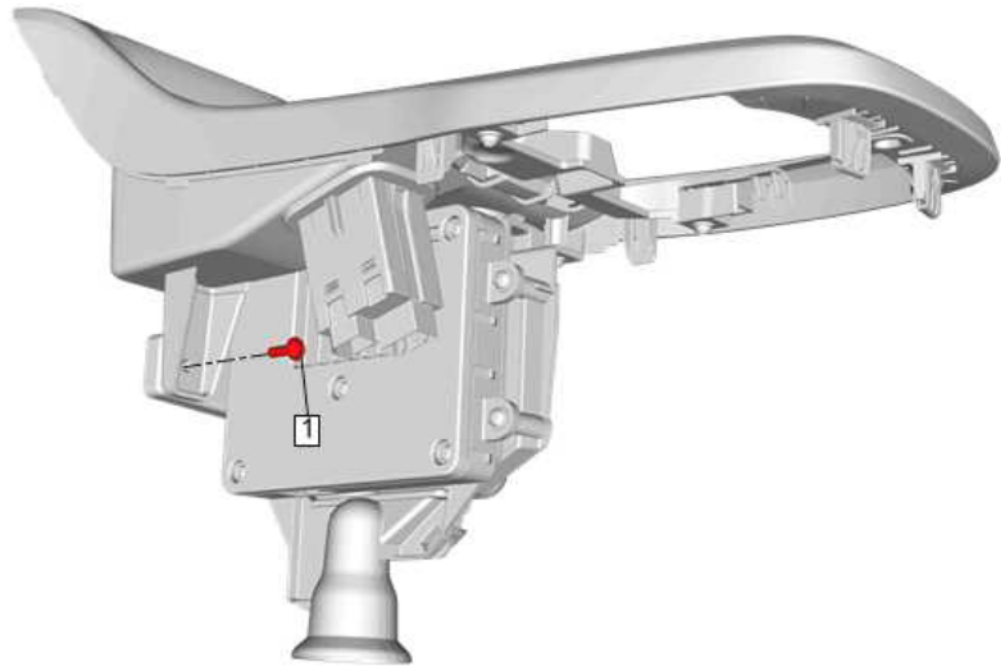


Fig. 3: Wireless Charging System Module Bracket Screw
Courtesy of GENERAL MOTORS COMPANY

2. Wireless Charging System Module Bracket Screw (1) - Remove

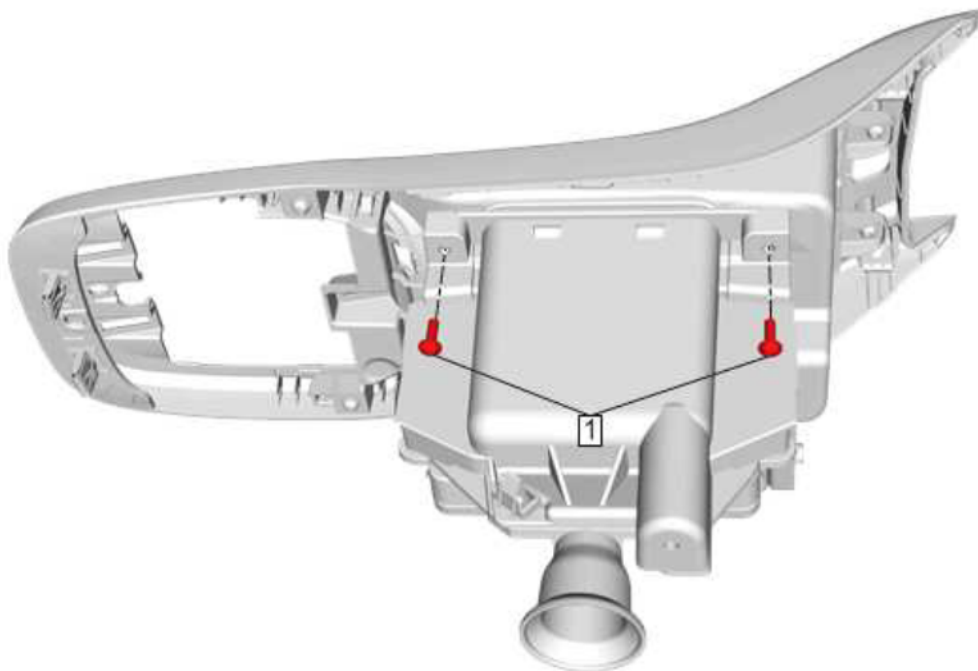


Fig. 4: Wireless Charging System Module Bracket Screw
Courtesy of GENERAL MOTORS COMPANY

3. Wireless Charging System Module Bracket Screw (1) - Remove

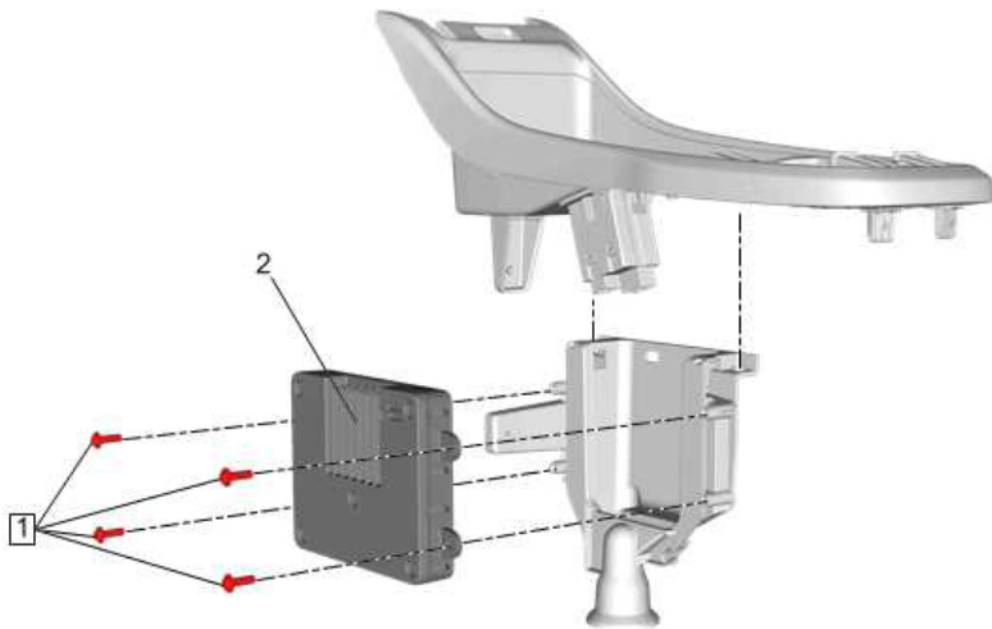


Fig. 5: Wireless Charging System Module
Courtesy of GENERAL MOTORS COMPANY

4. Wireless Charging System Module Bracket Screw (1) - Remove
5. Wireless Charging System Module (2) at Wireless Charging System Module Bracket - Remove
6. Transfer components as necessary.

Installation Procedure

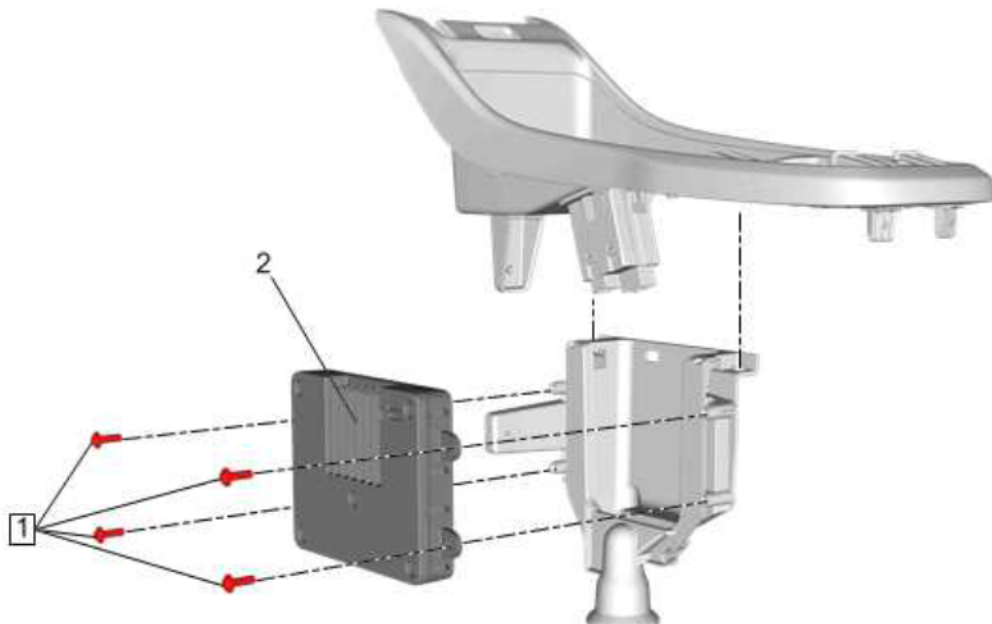


Fig. 6: Wireless Charging System Module
Courtesy of GENERAL MOTORS COMPANY

1. Wireless Charging System Module (2) at Wireless Charging System Module Bracket - Install
2. Wireless Charging System Module Bracket Screw (1) - Install and tighten to 1 N.m (9 lb in)

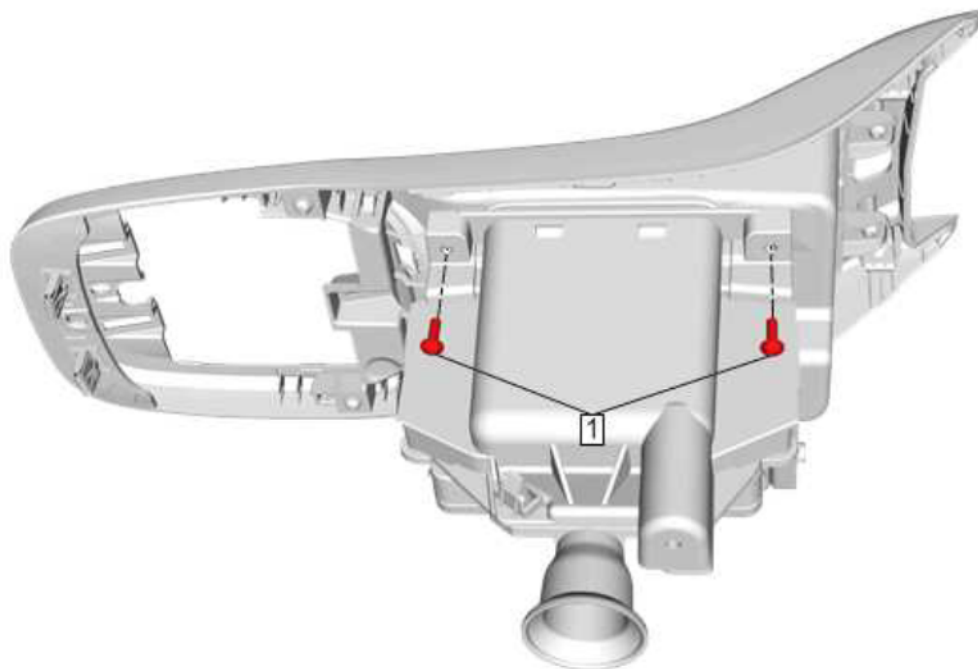


Fig. 7: Wireless Charging System Module Bracket Screw
Courtesy of GENERAL MOTORS COMPANY

3. Wireless Charging System Module Bracket Screw (1) - Install and tighten to 1 N.m (9 lb in)

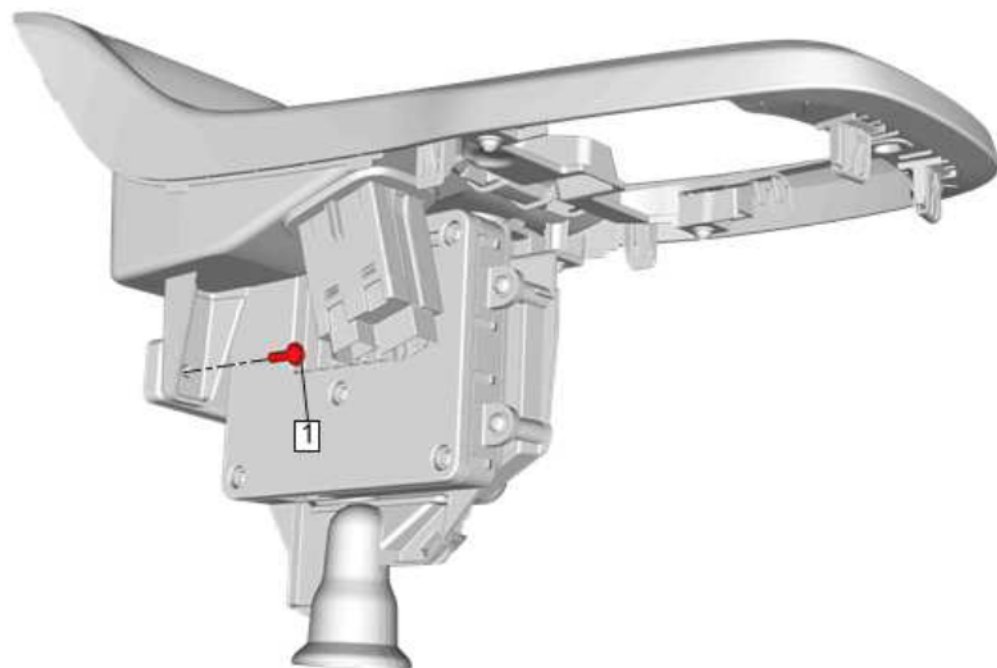


Fig. 8: Wireless Charging System Module Bracket Screw
Courtesy of GENERAL MOTORS COMPANY

4. Wireless Charging System Module Bracket Screw (1) - Install and tighten to 1 N.m (9 lb in)

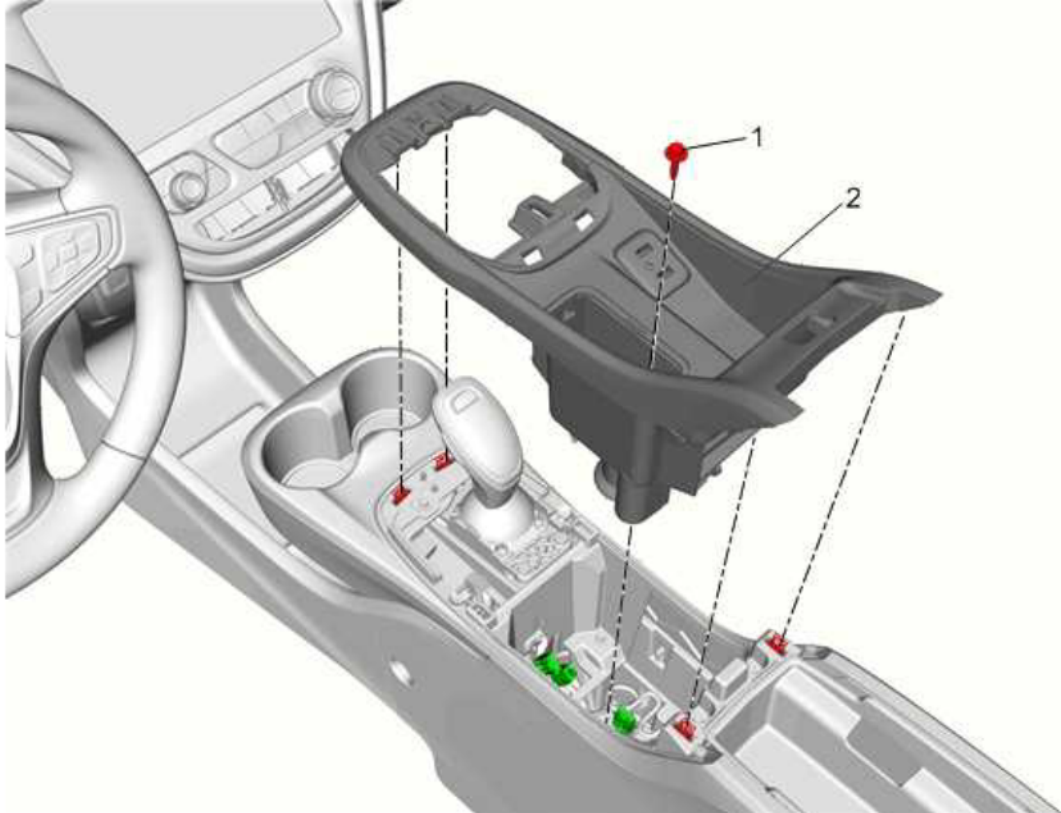


Fig. 9: Wireless Charging System Module Bracket Screw

Courtesy of GENERAL MOTORS COMPANY

5. Rear Floor Console Stowage Tray (2) - Install - **Rear Floor Console Stowage Tray Replacement (without K4C)** **Rear Floor Console Stowage Tray Replacement (with K4C)**

ACCESSORY POWER RECEPTACLE REPLACEMENT

Special Tools

EL-42059 Cigar Lighter Socket Remover

For equivalent regional tools, refer to **Special Tools**.

Removal Procedure

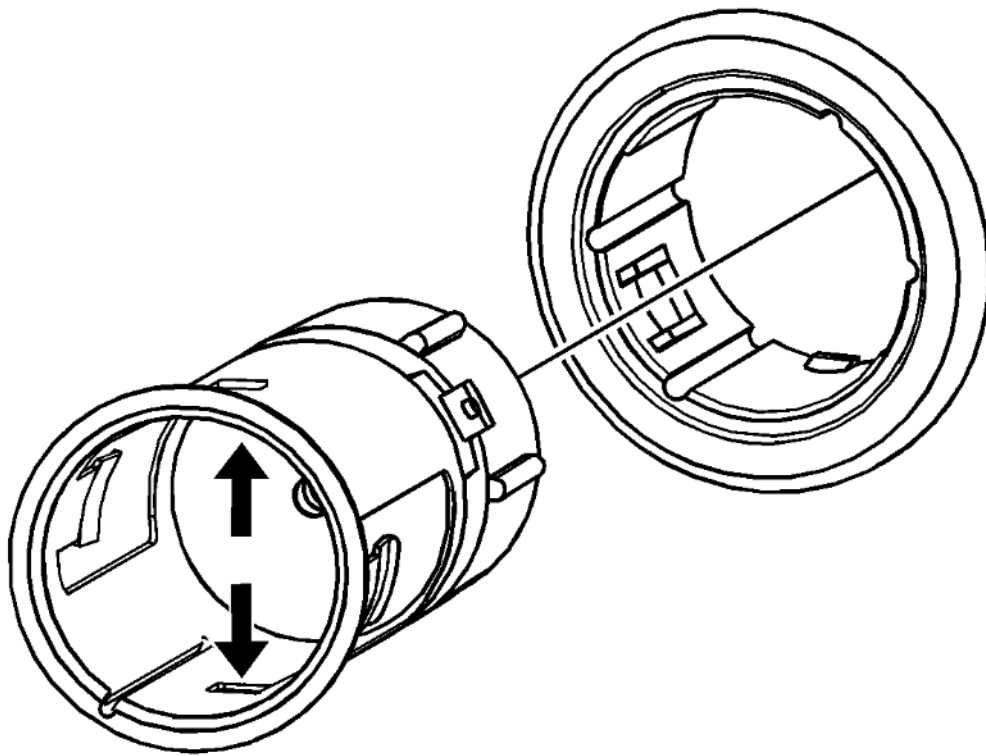


Fig. 10: Cigar Lighter Socket/Accessory Power Outlet
Courtesy of GENERAL MOTORS COMPANY

1. Remove the front floor console compartment trim plate. **Front Floor Console Compartment Trim Plate Replacement**
2. Remove the receptacle:
 1. Look into the receptacle. There are two 3 mm (0.11 in) tab windows 12 mm (0.47 in) from the front of the receptacle. The **EL-42059** remover pushes the plastic latches from these tab windows and the receptacle can be pulled straight out.
 2. Place one side of the "T" portion of the **EL-42059** remover into the tab window. The **EL-42059** remover will not fit straight into the receptacle. Angle the slightly for insertion into the receptacle.
 3. Insert the other side of the "T" into the opposite tab window.

You must move the **EL-42059** remover handle toward horizontal to engage the other tab window.
 4. Use the **EL-42059** remover to pull the receptacle straight out.

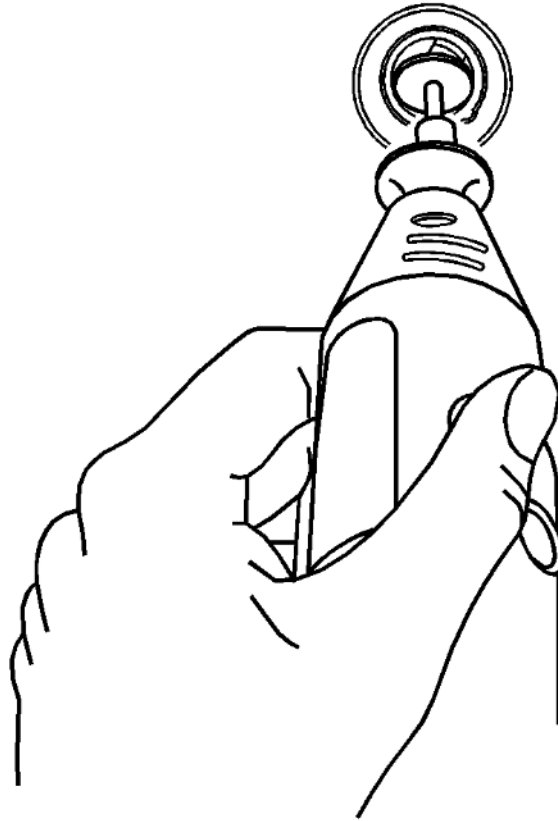


Fig. 11: Removing Cigar Housing Using Grinding Tool
Courtesy of GENERAL MOTORS COMPANY

3. If **EL-42059** remover tool fails to release the lighter socket from the retainer, perform the following alternate method:
 1. Insert a small grinding tool with a cutoff wheel into the socket.
 2. Remove the plastic latches in the 3 mm (0.11 in) square windows.
 3. Use the **EL-42059** remover as directed above to remove the socket.

Installation Procedure

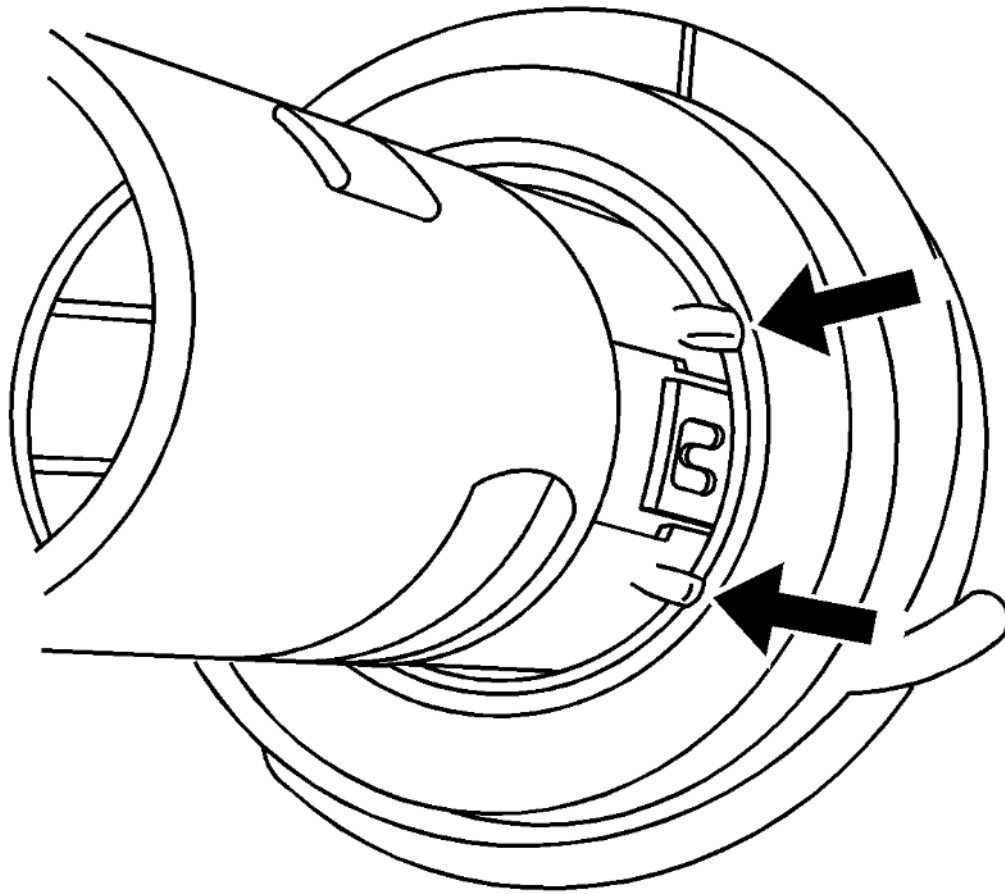


Fig. 12: Receptacle Tabs & Retainer Slots

Courtesy of GENERAL MOTORS COMPANY

1. Route the connector through the retainer. Align the accessory power receptacle retainer to the slot in the opening.
2. Install the retainer by pressing into place fully seated.
3. Align the tabs on the receptacle to the slots in the retainer. Install the accessory power receptacle by pressing into place until fully seated.
4. Install the front floor console compartment trim plate. **Front Floor Console Compartment Trim Plate Replacement**

DUAL CHARGE ONLY RECEPTACLE REPLACEMENT

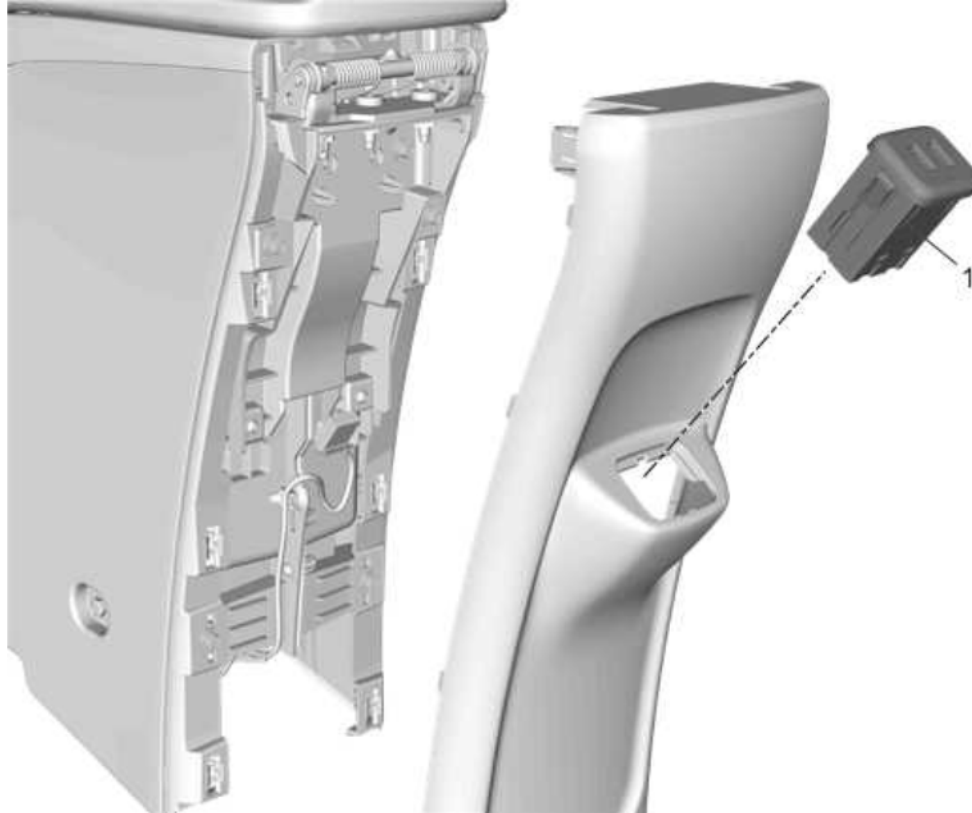


Fig. 13: Dual Charge Only Receptacle
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Front Floor Console Rear Trim Panel Replacement</u>	
1	Dual Charge Only Receptacle Procedure Use a flat bladed plastic trim tool.

DESCRIPTION AND OPERATION

MOBILE DEVICE WIRELESS CHARGER DESCRIPTION AND OPERATION

Mobile Device Wireless Charging System

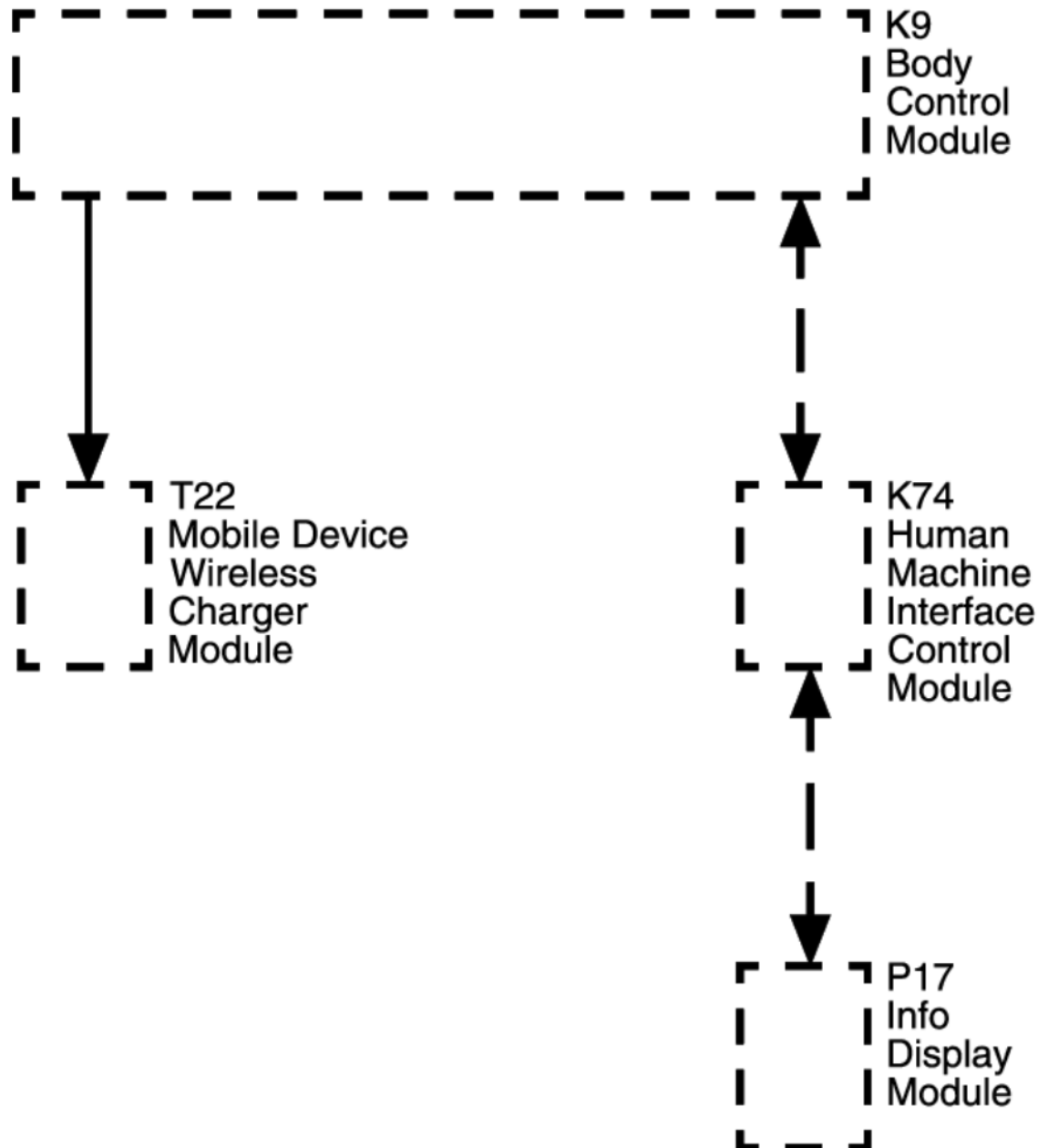


Fig. 14: Mobile Device Wireless Charging System Diagram
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
K9	K9 Body Control Module
T22	Mobile Device Wireless Charger Module
K74	Human Machine Interface Control Module
P17	P17 Info Display Module

The Mobile Device Wireless Charging System (WCS) is an system for wirelessly charging mobile devices. It is capable of charging the batteries of compatible mobile devices. A compatible device is one that is compliant with Power Matters Alliance (PMA) or Wireless Power Consortium (WPC) Standard, meaning that it is equipped with a PMA or WPC wireless charge "receiver" that will work with the charge "transmitter" installed in the vehicle. The devices may utilize built-in charging circuitry or an adapter (external plug-in device which contains the charging circuitry). To check for phone or other device compatibility, refer to GM Total Connect.

WARNING: Remove all objects from the charging pad before charging your mobile device. Objects, such as coins, keys, rings, paper clips, or cards, between the phone and charging pad will become very hot. On the rare occasion that the charging system does not detect an object, and the object gets wedged between the phone and charger, remove the phone and allow the object to cool before removing it from the charging pad, to prevent burns.

To charge a device, place it on the charging surface in the vehicle. There is a charging coil located in the center of the charging surface. The device has a charging coil typically near the center of the device. These coils must be lined up in order for charging to proceed. When the interruptible retained accessory power (IRAP) relay is closed (this is true typically when vehicle ignition is in Run or Accessory position), the WCS will detect the device, establish communications with the device to confirm it is a compatible device, and then deliver charging power to the device via wireless interface. The WCS will be able to deliver up to 5W of power to compatible devices. It shall only enter a charging state if communication is established and a compatible device is identified.

The WCS shall not enter a charging state if there is no communication established with a compatible device. If a non-compatible device or metallic foreign object is detected, the WCS will not transfer power. The charger monitors its internal temperature and will shut down if the charger temperature exceeds 185F (85C).

Indicator

The body control module will detect the device battery is charging and send a serial data message on the GMLAN bus to the radio display. The radio display will indicate a device is currently charging. When the indicator is toggling on and off this indicates a thermal limit has been reached and the device will not charge. For more information refer to the infotainment owners manual.

POWER OUTLETS DESCRIPTION AND OPERATION

System Description

The vehicle is fitted with a cigarette lighter and/or with a 12 V accessory power receptacle. The cigarette lighter and accessory power outlets are controlled by an ignition operated relay. The accessory power receptacle and cigarette lighter are operational when the ignition is turned to either the On or the Accessories positions. To operate the cigarette lighter, press in the lighter knob. When the element is hot, the lighter automatically pops out and is ready for use.

USB Receptacle Description and Operation (USS)

The vehicle is fitted with USB charge port receptacles at the rear of the floor console. These USB receptacles are for charging devices only. The USB receptacles are controlled by an ignition operated relay and are operational when the ignition is turned to either the On or the Accessories positions.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Illustration	Tool Number/ Description

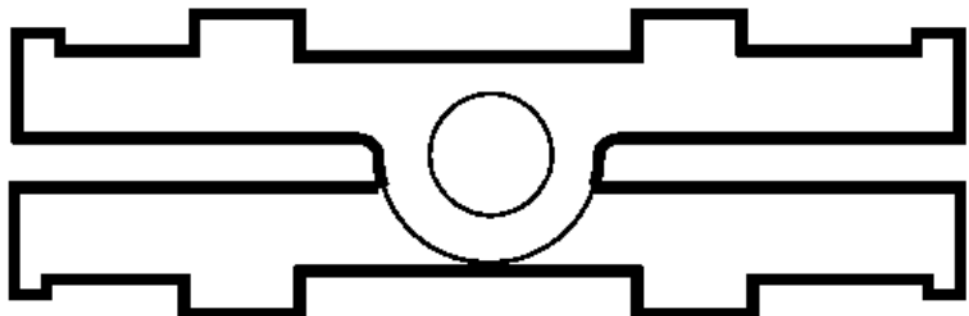
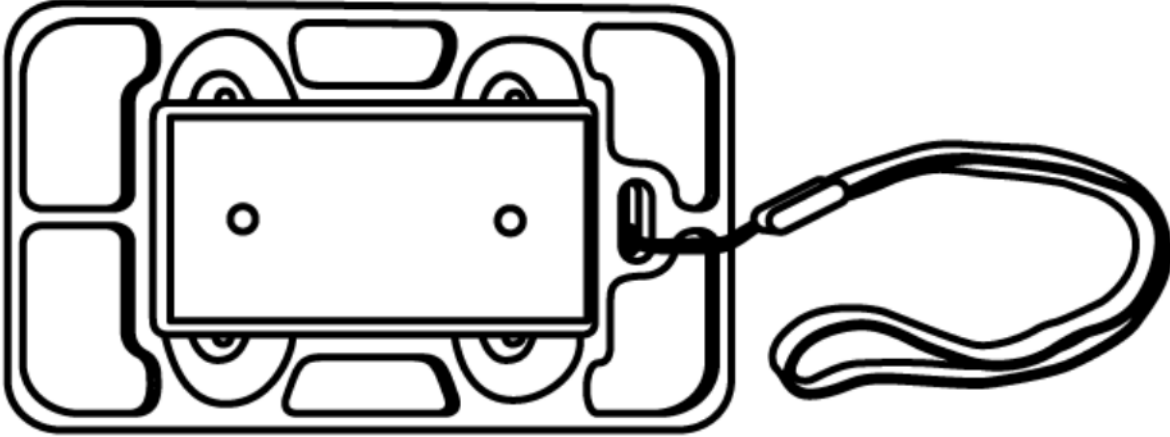
Illustration	Tool Number/ Description
	BO-48871 Cigar Lighter Socket Remover

Illustration	Tool Number/ Description
	EL-51755 Inductive Charging Test Tool