

ELECTRICAL

Power Outlets - CTS Coupe & Wagon

SCHEMATIC WIRING DIAGRAMS

CIGAR LIGHTER/POWER OUTLET WIRING SCHEMATICS

Cigar Lighter/Power Outlet

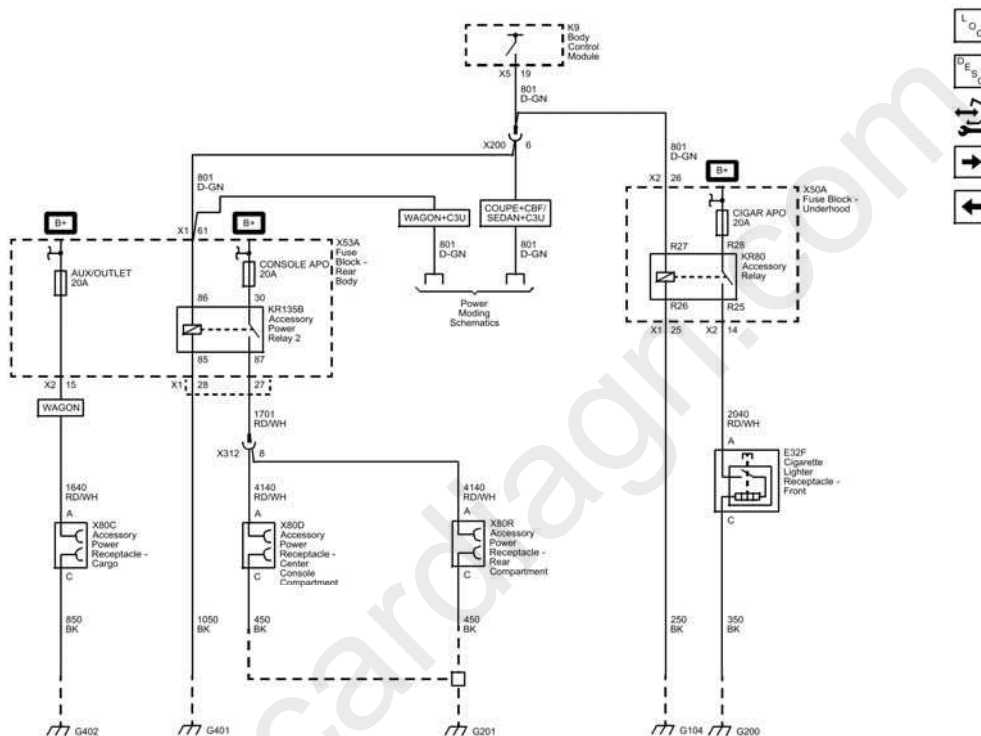


Fig. 1: Cigar Lighter/Power Outlet
Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

SYMPTOMS - POWER OUTLETS

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.

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
B+	1	1	-	-
Ground	-	1	-	-
1. Accessory Power Receptacle Malfunction				

Circuit/System Description

The accessory power receptacles and cigarette lighter receptacle are supplied B+ all the time.

Reference Information

Schematic Reference

Cigar Lighter/Power Outlet Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX - COUPE AND WAGON

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 appropriate accessory power receptacle or cigarette lighter receptacle.
2. Test for less than 5 ohms between the ground circuit terminal C and ground.
 - If greater than the specified range, test the ground circuit for an open/high resistance.
3. Verify that a test lamp illuminate between the B+ circuit terminal A and ground.
 - If test lamp does not illuminate, test the B+ circuit for a short to ground or an open/high resistance.
4. If the circuits test normal, test or replace the accessory power receptacle.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the diagnostic procedure.

Cigar Lighter Receptacle or 12-Volt Accessory Power Receptacle Replacement

REPAIR INSTRUCTIONS

CIGAR LIGHTER RECEPTACLE OR 12-VOLT ACCESSORY POWER RECEPTACLE REPLACEMENT

Special Tools

J 42059 Cigar Lighter Socket Remover

Removal Procedure

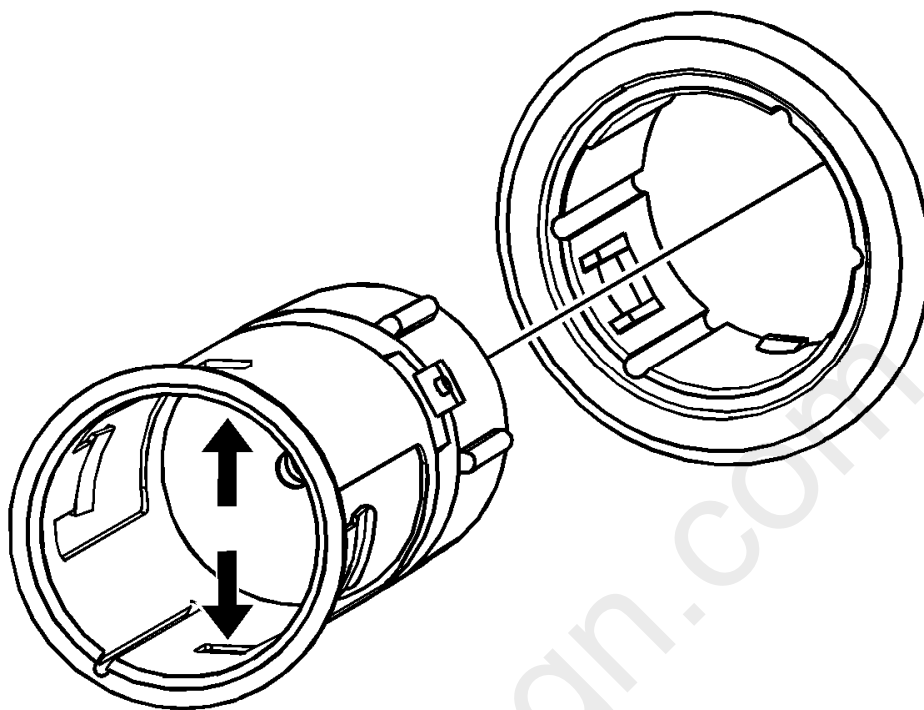


Fig. 2: View Of Cigar Lighter Socket/Accessory Power Outlet
Courtesy of GENERAL MOTORS COMPANY

1. Remove the auxiliary power outlet fuse from the fuse block.
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 **J 42059** cigar lighter socket 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 **J 42059** cigar lighter socket remover into the tab window. The **J 42059** cigar lighter socket remover will not fit straight into the receptacle. Angle the **J 42059** cigar lighter socket remover slightly for insertion into the receptacle.
 3. Insert the other side of the "T" into the opposite tab window.

You must move the **J 42059** cigar lighter socket remover handle toward horizontal to engage the other tab window.

4. Use the **J 42059** cigar lighter socket remover to pull the receptacle straight out.

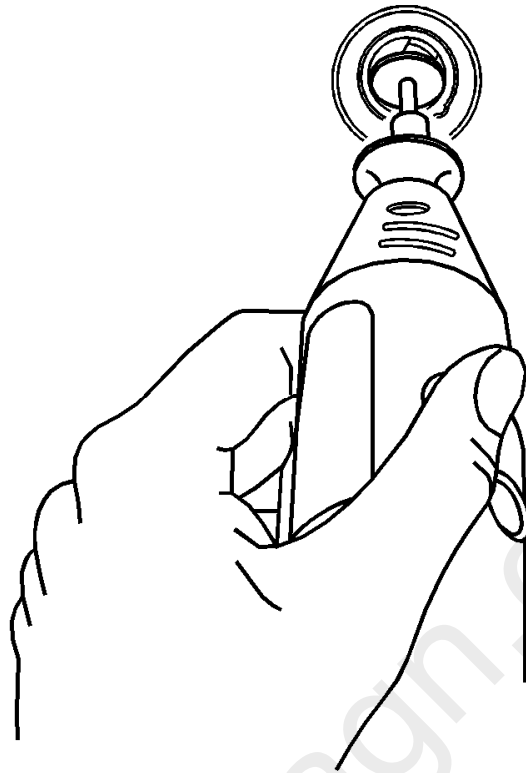


Fig. 3: Removing Cigar Housing Using Grinding Tool
Courtesy of GENERAL MOTORS COMPANY

3. If **J 42059** cigar lighter socket 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 **J 42059** cigar lighter socket remover as directed above to remove the socket.

Installation Procedure

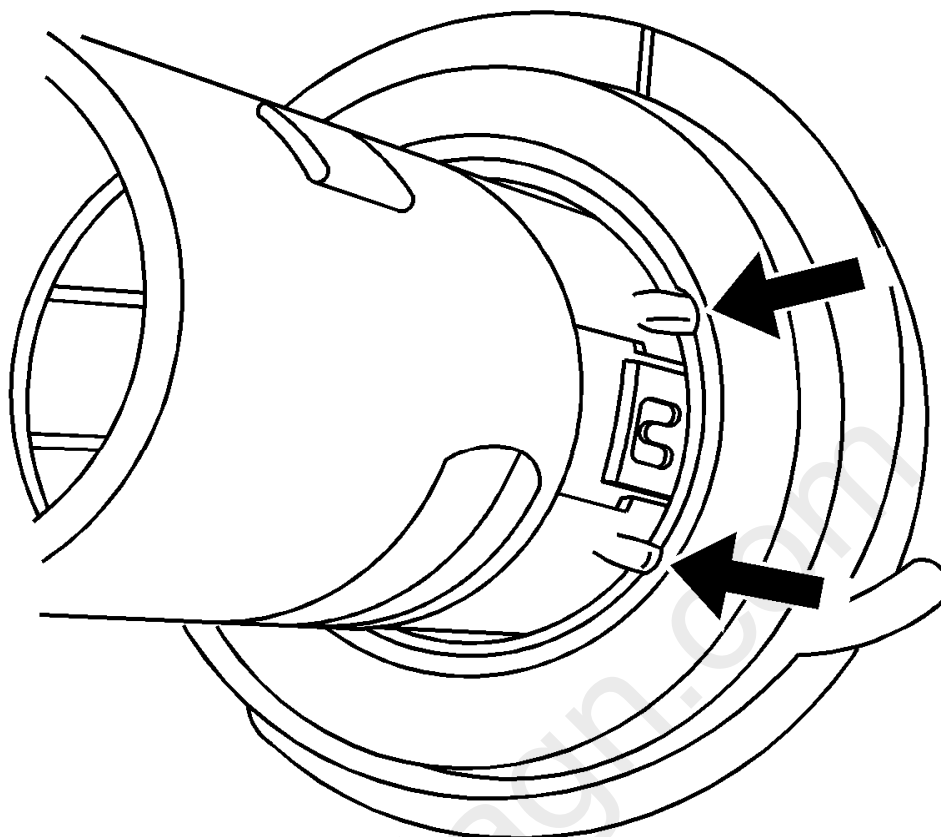


Fig. 4: View Of Receptacle Tabs & Retainer Slots
Courtesy of GENERAL MOTORS COMPANY

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. Connect the electrical connector to the receptacle.
4. Align the tabs on the receptacle to the slots in the retainer. Install the accessory power receptacle by pressing into place until fully seated.
5. Install the accessory power receptacle fuse.

DESCRIPTION AND OPERATION

POWER OUTLETS DESCRIPTION AND OPERATION

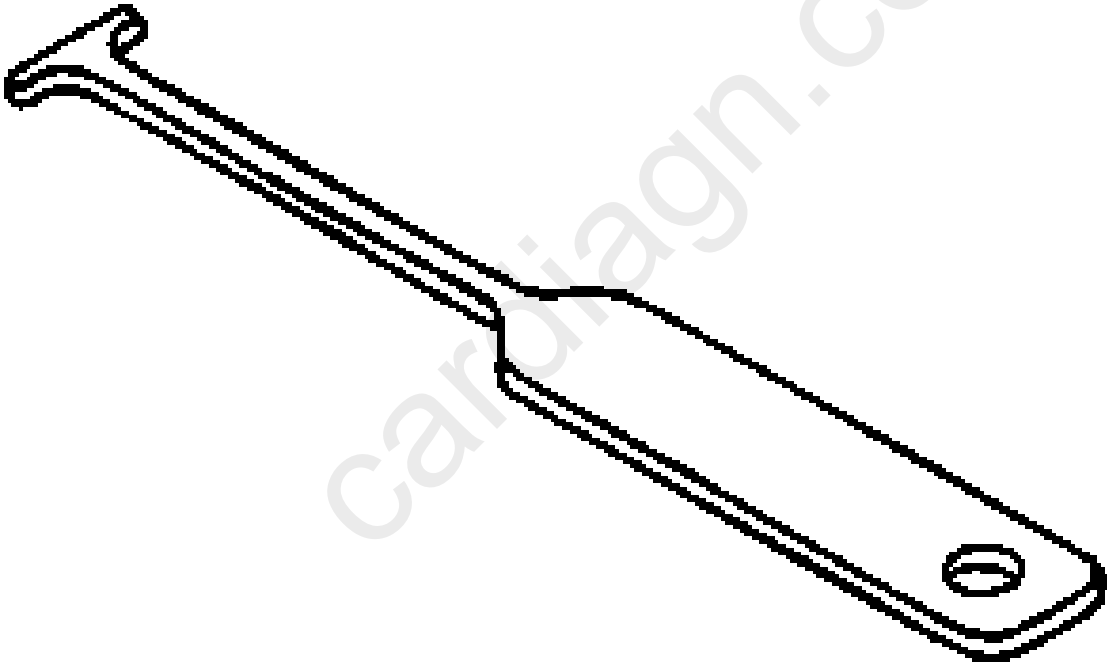
12 Volt Power Outlet Receptacle Description and Operation

The accessory power receptacles and cigarette lighter receptacle are supplied with battery voltage when the

ignition is ON or in the accessory position.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Illustration	Tool Number/ Description
 A line drawing of a long, thin metal tool. One end is bent into a hook shape. The other end is a straight handle with a circular hole near the tip. A diagonal watermark 'carbidagn.com' is visible across the tool.	J 42059 Cigar Lighter Socket Remover