Vehicle Access

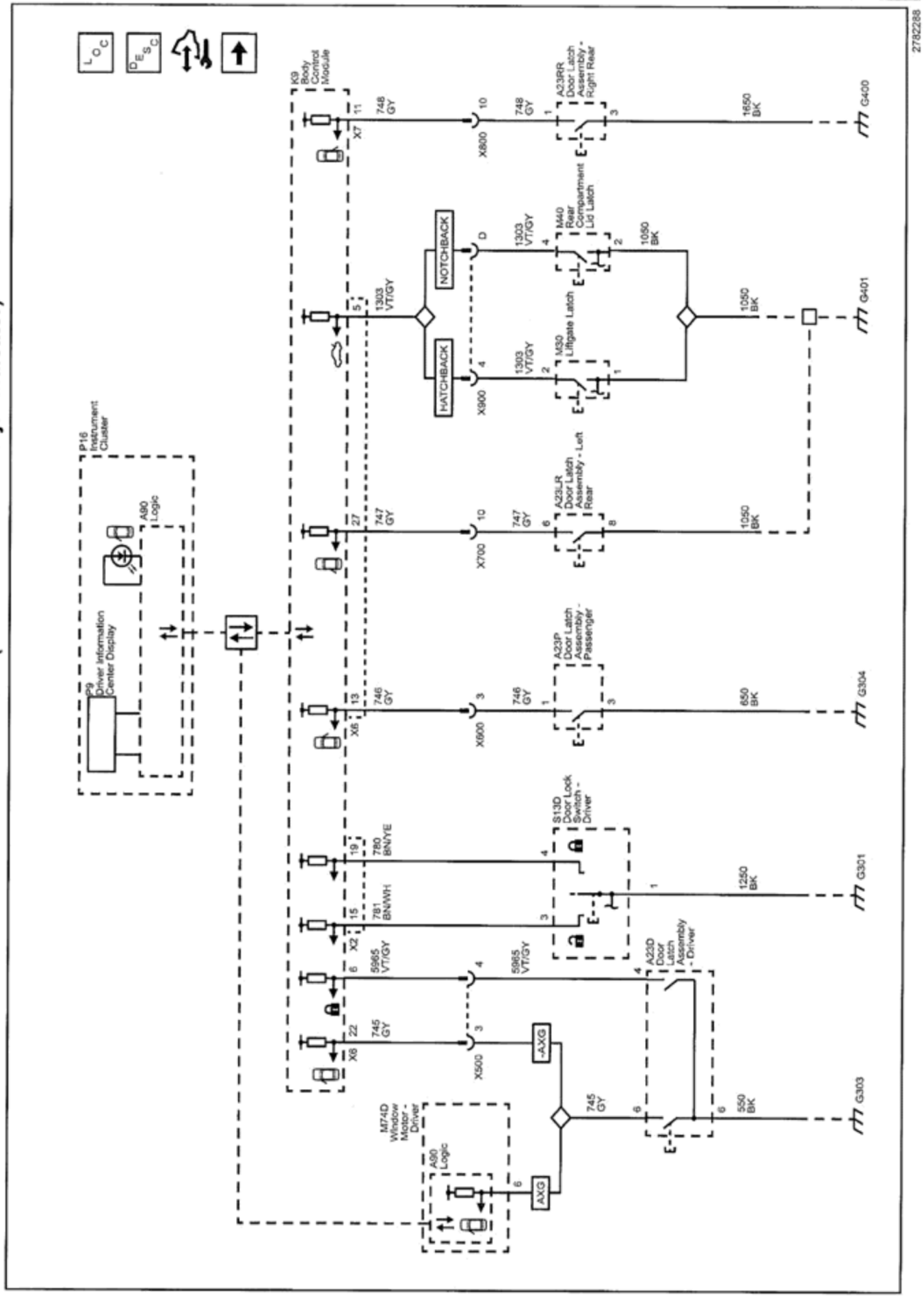
Specifications

Fastener Tightening Specifications

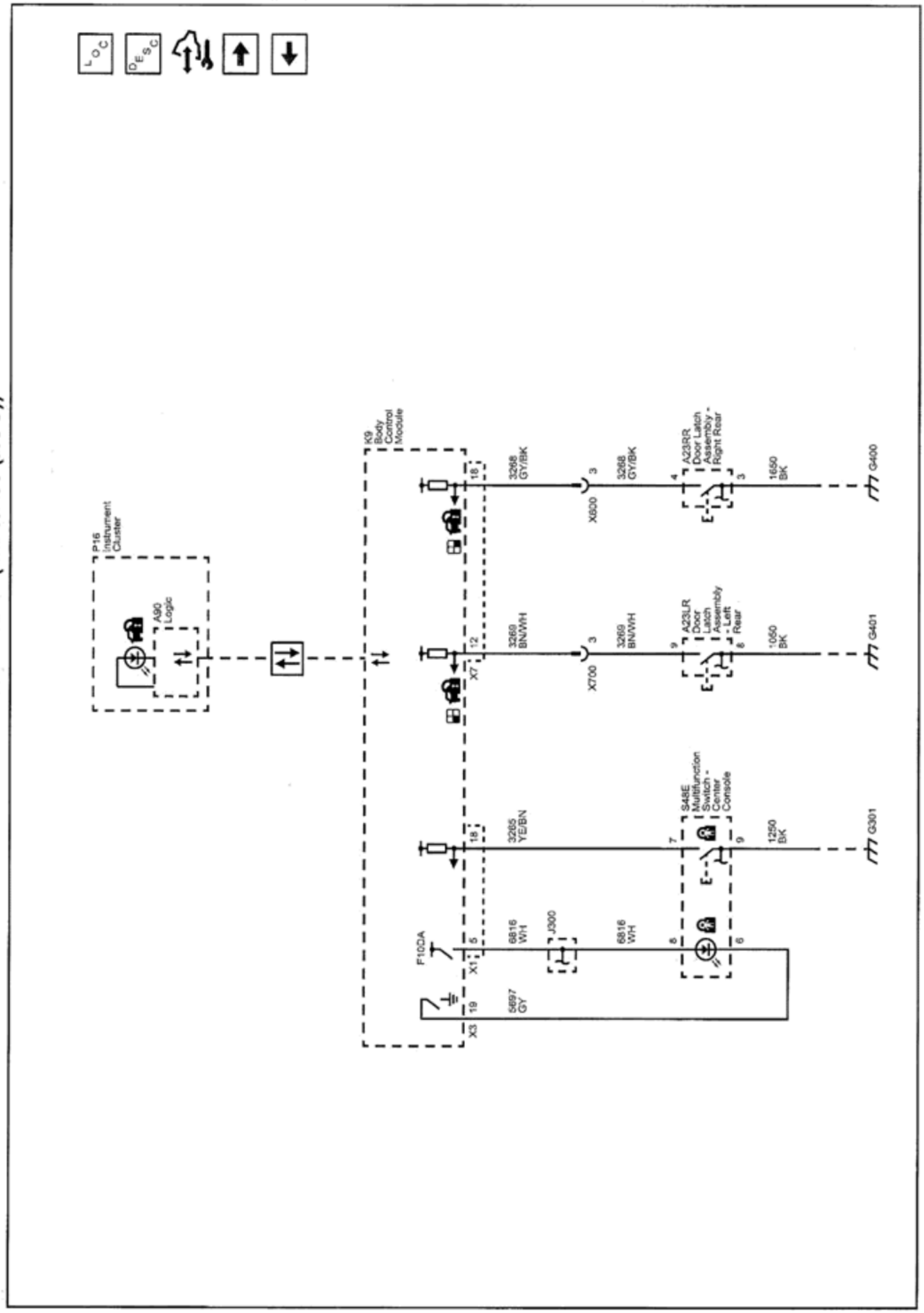
Application	Specification	
	Metric	English
Front Side Door Lock Cylinder Clamp Screw	5 N•m	44 lb in
Front Side Door Lock Screws	10 N•m	89 lb in
Front Side Door Outside Handle Bracket Screw	5 N•m	44 lb in
Front Side Door Striker Screws	22 N•m	16 lb ft
Liftgate Latch Screws	9 N•m	80 lb in
Liftgate Latch Striker Bolts	22 N•m	16 lb ft
Rear Compartment Lid Latch Screw	9 N•m	80 lb in
Rear Compartment Lid Latch Striker Bolts	22 N•m	16 lb ft
Rear Side Door Lock Cylinder Clamp Screw	5 N•m	44 lb in
Rear Side Door Lock Screws	10 N•m	89 lb in
Rear Side Door Outside Handle Bracket Screw	5 N•m	44 lb in
Rear Side Door Striker Screws	22 N•m	16 lb ft

Schematic and Routing Diagrams

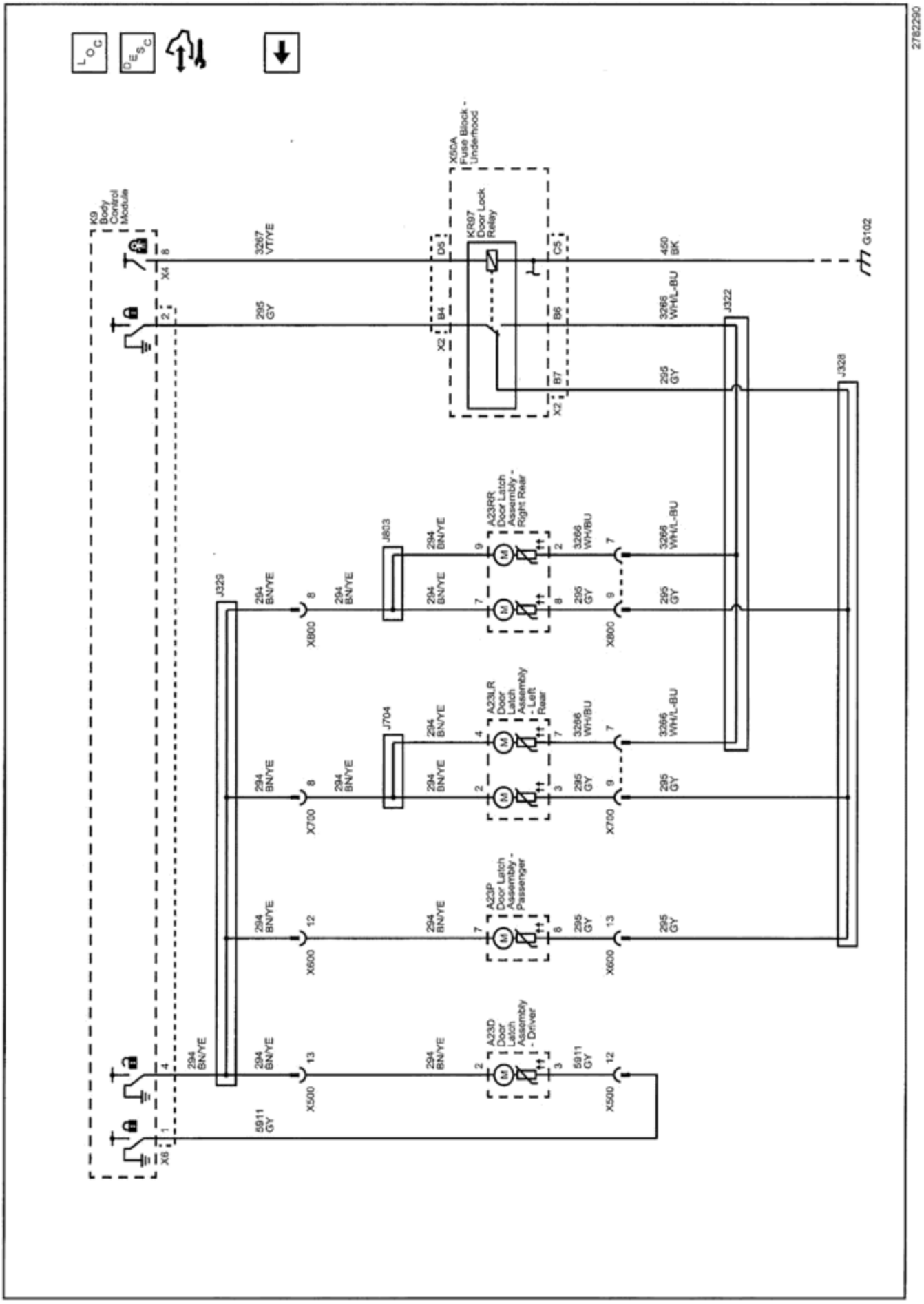
Door Lock/Indicator Schematics (Switches and Door Ajar Indicator)



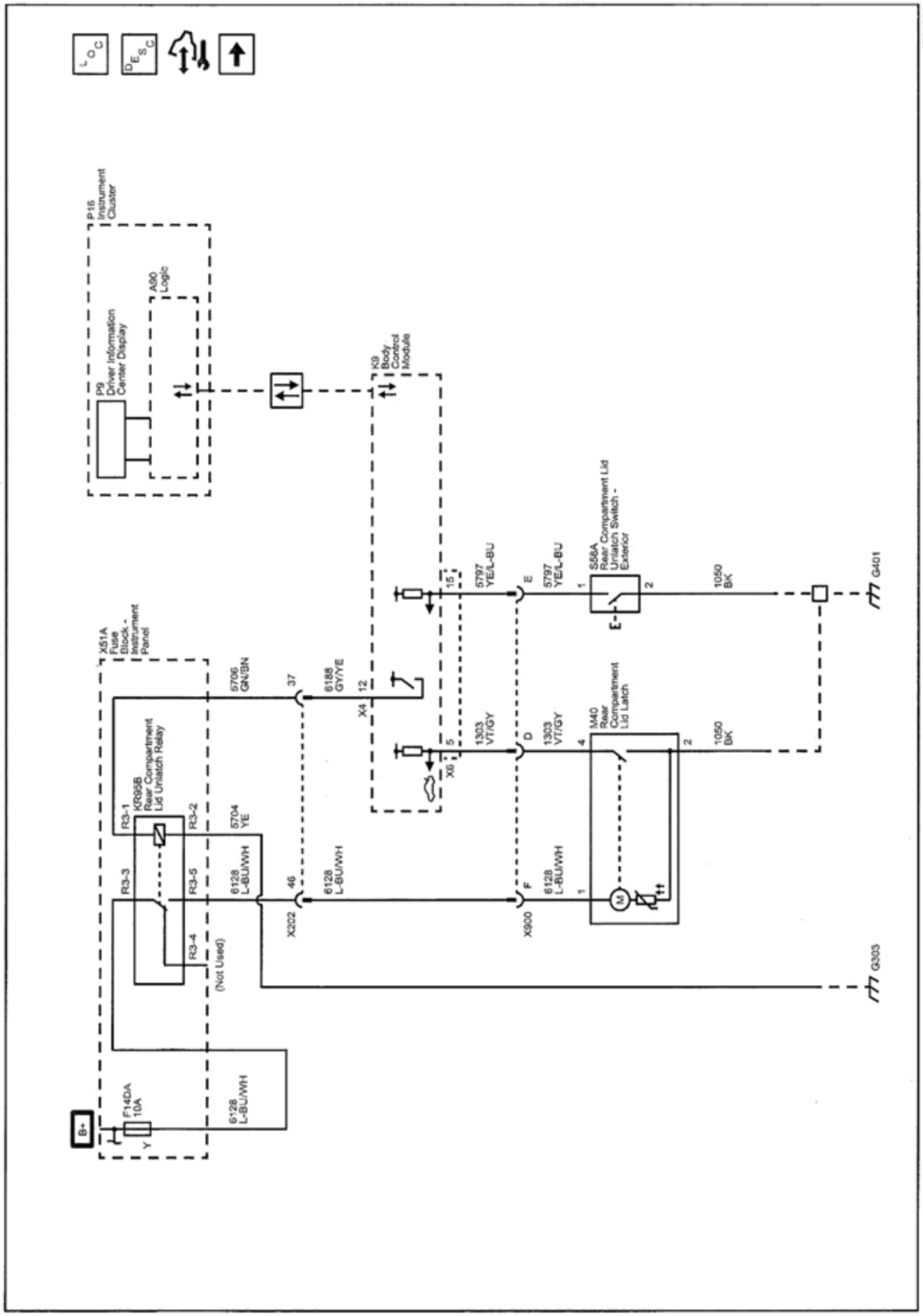
Door Lock/Indicator Schematics (Switches (NCG))



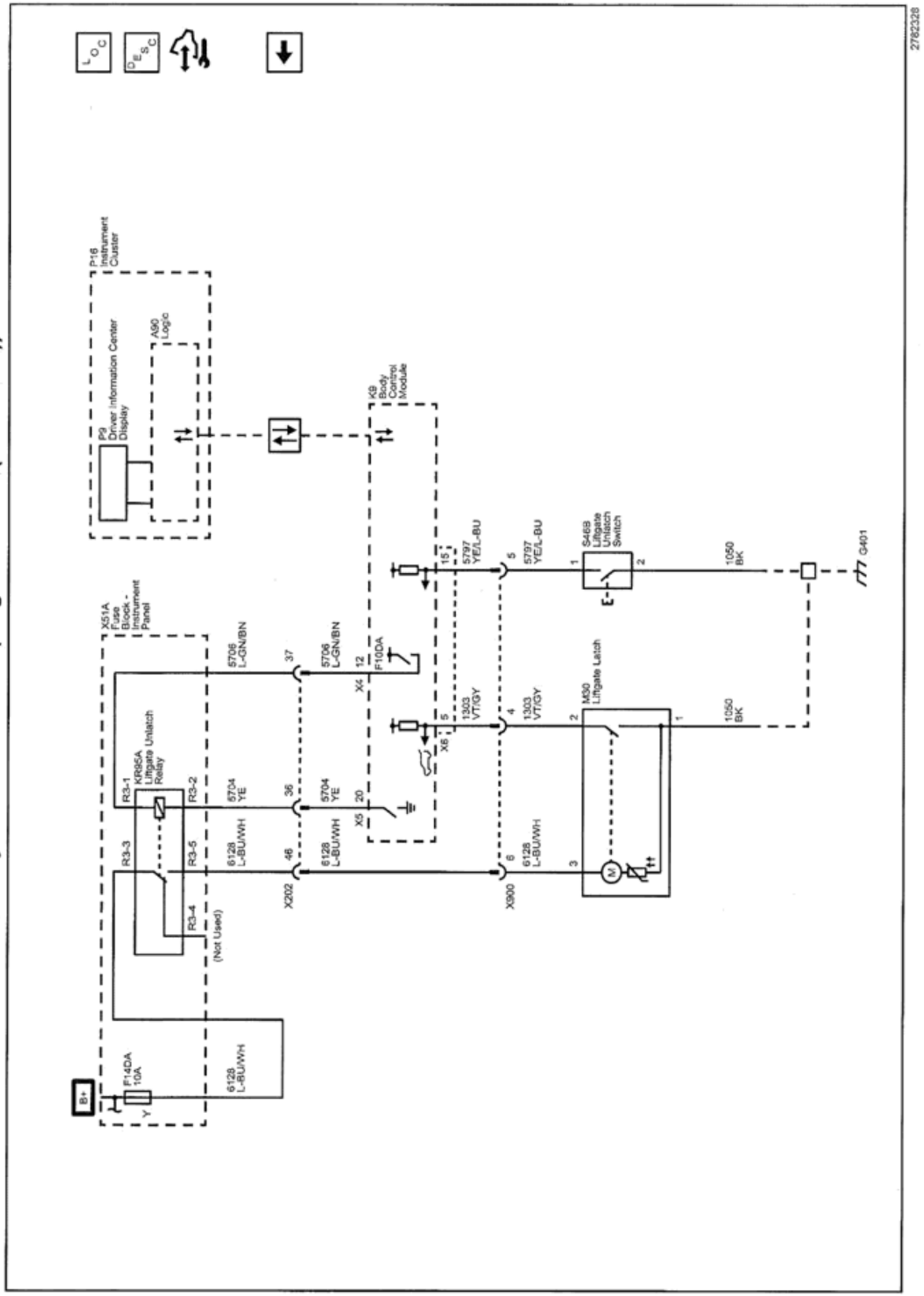
Door Lock/Indicator Schematics (Door Lock Actuators)



Release Systems Schematics (Rear Compartment Lid Release (Notchback))



Release Systems Schematics (Liftgate Release (Hatchback))



Diagnostic Information and Procedures

DTC B2494

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptor

DTC B2494 00: Liftgate Handle Switch Circuit Malfunction

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B2494 00	1	1	—
Ground	—	1	—	—
1. Exterior Rear Compartment Lid Release Switch Malfunction				

Circuit/System Description

When the ignition is ON, the body control module (BCM) supplies a signal to the liftgate unlatch switch through the liftgate release switch signal circuit. When the liftgate unlatch switch is pressed, the voltage within the signal circuit is pulled low and in response, the BCM will energize the liftgate unlatch relay.

Conditions for Running the DTC

The system voltage is 9–16 V.

Conditions for Setting the DTC

The BCM detects a short to ground in the liftgate release switch signal circuit for greater than 60 seconds

Action Taken When the DTC Sets

The BCM ignores the input from the liftgate unlatch switch.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics on page 4-241

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Luggage Compartment Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the liftgate unlatch switch.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing.

⇓ **If the parameter changes**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S46B liftgate unlatch switch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the K9 body control module.

4.2. Test for infinite resistance between the signal circuit terminal 1 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 body control module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, disconnect the harness connector at the K9 body control module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇓ **If Active**

7. Test or replace the S46B liftgate unlatch switch.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S46B liftgate unlatch switch.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S46B liftgate unlatch switch.

⇓ **If infinite resistance**

3. Test for less than 3 Ω between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.

⇒ **If 3 Ω or greater**

Replace the S46B liftgate unlatch switch.

⇓ **If less than 3 Ω**

4. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the diagnostic procedure.

- *Liftgate Release Switch Replacement on page 4-320*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B252C

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptor

DTC B252C 00: Child Security Lock Switch Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B252C 00	1	1	—
Ground	—	1	—	—
1. Child Security Lockout Malfunction				

Circuit/System Description

The body control module (BCM) monitors the voltage level in the child security door lockout switch signal circuit, when the switch is in the open position the voltage in the signal circuit will be equal to the B+ voltage level. When the child security door lockout switch is pressed, voltage within the signal circuit drops and the BCM will detect the voltage drop and will energize the Door Lock relay to disable the interior rear door handles.

Conditions for Running the DTC

The system voltage is 9–16 V.

Conditions for Setting the DTC

The BCM has detected a short to ground on the child security lockout switch signal circuit for greater than 60 seconds.

Action Taken When the DTC Sets

- The interior rear door handles will always be disabled or will not lockout depending upon the latch states when the fault occurred
- The BCM will ignore the input from the lockout switch.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics on page 4-238

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Left Rear Child Security Lock Switch and Right Rear Child Security Lock Switch parameters change between Inactive and Active when pressing and depressing the child security lockout switch.

⇒ **If the parameters do not change**

Refer to Circuit/System Testing.

⇓ **If the parameters change**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S48E multifunction switch-center console. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 9 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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. Install a 3 A fused jumper wire between the signal circuit terminal 7 and the ground circuit terminal 9
4. Verify the scan tool Left Rear Child Security Lock Switch and Right Rear Child Security Lock Switch parameters changes to Active from Inactive.

⇒ **If the parameter does not change**

4.1. Ignition OFF, disconnect the harness connector at the K9 body control module, ignition ON.

4.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

4.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇓ **If the parameter changes**

5. Test or replace the S48E multifunction switch-center console.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S48E multifunction switch-center console.
2. Test for infinite resistance between the signal terminal 7 and the ground terminal 9 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S48E multifunction switch-center console.

⇓ **If infinite resistance**

3. Test for less than 3 Ω between the signal terminal 7 and the ground terminal 9 with the switch in the closed position.

⇒ **If 3 Ω or greater**

Replace the S48E multifunction switch-center console.

⇓ **If less than 3 Ω**

4. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Front Floor Console Multifunction Switch Replacement on page 8-105*
- *Control Module References on page 6-3* for the BCM replacement, programming and setup

DTC B252E

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptor

DTC B252E 02: Child Security Lock Switch Indicator Circuit Short To Ground

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B252E 02	1	1	---
1. Child Security Indicator Inoperative				

Circuit/System Description

The body control module (BCM) will provide a ground for the child door lock indicator control circuit when the BCM receives a child door lockout command. The indicator will illuminate to indicate that the interior rear door handles have been disabled.

Conditions for Running the DTC

The system voltage is 9–16 V.

Conditions for Setting the DTC

The BCM has detected a short to ground on the child security lockout indicator control circuit for greater than 60 seconds.

Action Taken When the DTC Sets

The child lockout system will function normally when commanded by the BCM, but the child security lockout indicator will be continuously illuminated.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles

Reference Information

Schematic Reference

Door Lock/Indicator Schematics on page 4-238

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the function of the child lockout indicator when commanding the Child Lockout Indicator ON and OFF with a scan tool.

⇒ **If the child lockout indicator is always ON or always OFF**

Refer to Circuit/System Testing – Lockout Indicator Malfunction.

⇓ **If the child lockout indicator turns ON and turns OFF**

3. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the X1 harness connector at the S48E Multifunction Switch-Center Console. Ignition ON
2. Connect a test lamp between the control circuit terminal 6 and B+.

3. Verify the test lamp turns ON and OFF when commanding the Child Lockout Indicator ON and OFF with a scan tool.

⇒ **If the test lamp is always OFF**

3.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

3.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

3.3. Ignition OFF.

3.4. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

3.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

3.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

4. Test or replace the S48E Multifunction Switch-Center Console.

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair procedure.

- *Front Floor Console Multifunction Switch Replacement on page 8-105*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B3125, B3130, or B3135

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptors

DTC B3125: Driver Door Only Unlock Circuit
DTC B3130: All Doors Unlock Circuit
DTC B3135: All Doors Lock Circuit

For symptom byte information refer to: *Symptom Byte List on page 6-85*

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B3125 02, B3130 02, B3135 02	B3125 02, B3130 02, B3135 02	—	—
BCM Ground	—	1, 2, 3, 4	—	—
Door Lock/Unlock Control	B3125 02, B3130 02, B3135 02	2, 3, 4	1, 2, 3, 4	—
Door Lock Control	B3125 02, B3130 02, B3135 02	1	1, 2, 3, 4	—
Driver Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	1	1, 2, 3, 4	—
Left Rear Door Latch Lock Control	B3125 02, B3130 02, B3135 02	3	1, 2, 3, 4	—
Left Rear Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	3	1, 2, 3, 4	—
Passenger Door Latch Lock Control	B3125 02, B3130 02, B3135 02	2	1, 2, 3, 4	—
Passenger Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	2	1, 2, 3, 4	—
Right Rear Door Latch Lock Control	B3125 02, B3130 02, B3135 02	4	1, 2, 3, 4	—
Right Rear Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	4	1, 2, 3, 4	—

1. Driver Door Lock Malfunction
2. Passenger Door Lock Malfunction
3. Left Rear Door Lock Malfunction
4. Right Rear Door Lock Malfunction

Circuit/System Description

The Body Control Module (BCM) controls the driver and passenger door latches. When the BCM receives a driver door unlock, passenger door unlock or all door lock command, it will provide voltage to the appropriate door lock circuits and ground to the opposite door lock circuits causing the actuator to perform the lock or unlock function.

Conditions for Running the DTC

When the output is actively being requested by the BCM.

Conditions for Setting the DTC

B3125 02, B3130 02 and B3135 02

- A short to ground or an open/high resistance in the BCM B+ circuit.
- The BCM detects a short to ground on a door latch control circuit.

Action Taken When the DTC Sets

The power door locks will be inoperative.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics on page 4-238
Body Control System Schematics on page 11-8

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify all vehicle doors LOCK and UNLOCK when commanding the All Doors Lock/Unlock with a scan tool.

⇒ **If only the driver door LOCK or UNLOCK functions do not work**

Refer to Circuit/System Testing – Driver Door Lock Malfunction.

⇒ **If one or more, but not all, passenger door LOCK or UNLOCK functions do not work**

Refer to Circuit/System Testing – Passenger Door Lock Malfunction.

⇒ **If all door LOCK and UNLOCK functions do not work**

Refer to Circuit/System Testing – All Door Lock Inoperative.

⇓ **If the LOCK and UNLOCK function for all doors works**

3. All OK.

Circuit/System Testing

Driver Door Lock Malfunction

1. Ignition OFF, disconnect the harness connector at the A23D Door Latch Assembly–Driver. Ignition ON.

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

2. Test for greater than 7 V between the control circuit terminal 3 and ground.

⇒ **If 7 V or less**

2.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

2.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

2.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance on the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

3. Test for greater than 7 V between the control circuit terminal 2 and ground.

⇒ **If 7 V or less**

3.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

3.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

3.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance on the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

4. Test or replace the A23D Door Latch Assembly–Driver.

Passenger Door Lock Malfunction

1. Ignition OFF, disconnect the harness connector at the appropriate passenger or rear A23 Door Latch Assembly. Ignition ON.

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

2. Test for greater than 7 V between the control circuit terminal listed below and ground:
   - A23P Door Latch Assembly-Passenger — control terminal 7
   - A23P Door Latch Assembly-Passenger — control terminal 8
   - A23RR Door Latch Assembly-Right Rear — control terminal 7
   - A23RR Door Latch Assembly-Right Rear — control terminal 8
   - A23LR Door Latch Assembly-Left Rear — control terminal 2
   - A23LR Door Latch Assembly-Left Rear — control terminal 3

⇒ **If 7 V or less**

2.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

2.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

2.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance on the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

3. Test or replace the A23 Door Latch Assembly.

All Door Locks Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the X6 harness connector at the K9 Body Control Module. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 3 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 OFF, disconnect the X2 harness connector at the K9 Body Control Module, ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

4.1. Ignition OFF.

4.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, 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.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

4.1. Ignition OFF.

4.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Disconnect the harness connector at each of the A23 Door Latch Assemblies.

4.4. Test for infinite resistance between each control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the appropriate A23 Door Latch Assembly.

⇓ **If the test lamp illuminates**

5. Ignition OFF, connect the X2 and X6 harness connectors at the K9 Body Control Module. Disconnect the harness connector at the A23D Door Latch Assembly-Driver, ignition ON.

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

6. Test for greater than 7 V between the control circuit terminal 2 and ground.

⇒ **If 7 V or less**

6.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit terminal listed below and ground:

- Control circuit terminal 1 X6
- Control circuit terminal 2 X6
- Control circuit terminal 4 X6

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

7. Replace the K9 Body Control Module.

Component Testing

1. Ignition OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
2. Install a 25 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the A23 Door Latch Assembly should perform the LOCK and UNLOCK function.

⇒ **If the actuator does not perform the LOCK and UNLOCK function**

Replace the A23 Door Latch Assembly.

⇓ **If the actuator performs the LOCK and UNLOCK function**

3. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Front Side Door Latch Replacement on page 4-299*
- *Rear Side Door Latch Replacement on page 4-301*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B3140 or B3150

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptors

DTC B3140 00: Driver Door Unlock Switch Circuit
DTC B3150 00: Left Front Door Lock Switch Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Lock Signal	B3150 00	1	1	—
Unlock Signal	B3140 00	2	2	—
Ground	—	3	—	—
1. Door Lock Switch Lock Function Inoperative 2. Door Lock Switch Unlock Function Inoperative 3. Door Lock Switch Lock and Unlock Functions Inoperative				

Circuit/System Description

The BCM monitors the voltage level of the door lock and door unlock signal circuits. When the driver door lock switch is in the open position, the voltage level in the signal circuit will be near 0 V. When the driver door lock switch is pressed to the lock or unlock position, a signal will be sent to the BCM requesting a lock or unlock command.

Conditions for Running the DTC

The system voltage is 9–16 V.

Conditions for Setting the DTC

B3140 00

The BCM detects short to ground in the unlock signal circuit for greater than 60 seconds.

B3150 00

The BCM detects a short to ground in the lock signal circuit for greater than 60 seconds.

Action Taken When the DTC Sets

B3140 00

The BCM will ignore the unlock signal and the doors will not unlock when using the driver door lock switch.

B3150 00

The BCM will ignore the lock signal and the doors will not lock when using the driver door lock switch.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics on page 4-238

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool BCM Central Door Lock Switch on Console parameter changes from Inactive to Lock and Unlock when pushing the appropriate switch on the driver door lock switch.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing.

⇓ **If the parameter changes**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S13D door lock switch-driver. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 1 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Central Door Lock Switch on Console parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the X2 harness connector at the K9 body control module.

4.2. Test for infinite resistance between the signal circuit terminal 15 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

4.3. Test for infinite resistance between the signal circuit terminal 19 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 body control module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 3 and the ground circuit terminal 1.
6. Verify the scan tool Central Door Lock Switch on Console parameter is Unlock.

⇒ **If not Unlock**

6.1. Ignition OFF, disconnect the X2 harness connector at the K9 body control module, ignition ON.

6.2. Test for less than 1 V between the signal circuit terminal 15 and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇓ **If Unlock**

7. Install a 3 A fused jumper wire between the signal circuit terminal 4 and the ground circuit terminal 1.
8. Verify the scan tool Central Door Lock Switch on Console parameter is Lock.

⇒ **If not Lock**

8.1. Ignition OFF, disconnect the X2 harness connector at the K9 body control module, ignition ON.

8.2. Test for less than 1 V between the signal circuit terminal 19 and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

8.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇓ **If Lock**

9. Test or replace the S13D door lock switch-driver.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S13D door lock switch-driver.
2. Test for infinite resistance between the signal terminal 4 and the ground terminal 1 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S13D door lock switch-driver.

⇓ **If infinite resistance**

3. Test for infinite resistance between the signal terminal 3 and the ground terminal 1 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S13D door lock switch-driver.

⇓ **If infinite resistance**

4. Test for less than 2 Ω between the signal terminal 4 and the ground terminal 1 with the switch in the Lock position.

⇒ **If 2 Ω or greater**

Replace theS13D door lock switch-driver.

⇓ **If less than 2 Ω**

5. Test for less than 2 Ω between the signal terminal 3 and the ground terminal 1 with the switch in the Unlock position.

⇒ **If 2 Ω or greater**

Replace the S13D door lock switch-driver.

⇓ **If less than 2 Ω**

6. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the diagnostic procedure.

- *Door Lock Switch Replacement on page 4-321*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B324A or B3245

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptors

DTC B324A 01: Rear Cargo Door Unlock Motor Circuit Short to Battery
DTC B3245 02: Rear Cargo Door Lock Motor Circuit Short to Ground

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B3245 02	1	B324A 01	—
1. Liftgate Release Malfunction				

Circuit/System Description

When the body control module (BCM) receives a liftgate release command, it will provide voltage to one side of the relay and ground to the other side of the relay. This will energize the relay causing the switch side of the relay to close and will then provide B+ voltage to the liftgate or rear closure latch.

Conditions for Running the DTC

- The system voltage is 9–16 V.
- When the relay is actively commanded by the BCM.

Conditions for Setting the DTC

B324A 01

The BCM detects a short to voltage in the liftgate release relay control circuit.

B3245 02

The BCM detects a short to ground in the liftgate release relay control circuit.

Action Taken When the DTC Sets

The liftgate latch will be inoperative.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics on page 4-241

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Luggage Compartment Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the operation of the liftgate latch by pressing the liftgate unlatch switch.

⇒ **If the liftgate latch does not UNLATCH**

Refer to Circuit/System Testing.

⇓ **If the liftgate latch does UNLATCH**

3. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the KR95A liftgate unlatch relay. Ignition ON.
2. Connect a test lamp between the control circuit terminal 1 and ground.

3. Verify the test lamp briefly illuminates when commanding the Trunk Lid Unlatch On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

3.1. Ignition OFF, disconnect the harness connector at the K9 body control module.

3.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

3.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇒ **If the test lamp is always ON**

3.1. Ignition OFF, disconnect the harness connector at the K9 body control module, ignition ON.

3.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 body control module.

⇓ **If the test lamp turns ON and OFF**

4. Connect a test lamp between the control circuit terminal 2 and B+.
5. Verify the test lamp briefly illuminates when commanding the Trunk Lid Unlatch On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

5.1. Ignition OFF, disconnect the harness connector at the K9 body control module, ignition ON.

5.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

5.3. Ignition OFF.

5.4. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇒ **If the test lamp is always ON**

5.1. Ignition OFF, disconnect the harness connector at the K9 body control module.

5.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 body control module.

⇓ **If the test lamp turns ON and OFF**

6. Test or replace the KR95A liftgate unlatch relay.

Component Testing

Relay Test

1. Ignition OFF, disconnect the KR95A liftgate unlatch relay.
2. Test for 60–200 Ω between terminals 1 and 3.

⇒ **If less than 60 Ω or greater than 200 Ω**

Replace the KR95A liftgate unlatch relay.

⇓ **If between 60–200 Ω**

3. Test for infinite resistance between the terminals listed below:
   - 4 and 3
   - 4 and 5
   - 4 and 1
   - 5 and 1

⇒ **If less than infinite resistance**

Replace the KR95A liftgate unlatch relay.

⇓ **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal 3 and 12 V. Install a jumper wire between relay terminal 1 and ground.
5. Test for less than 2 Ω between terminals 4 and 5.

⇒ **If 2 Ω or greater**

Replace the KR95A liftgate unlatch relay.

⇓ **If less than 2 Ω**

6. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the diagnostic procedure.

- *Relay Replacement (Within an Electrical Center) on page 11-607* or *Relay Replacement (Attached to Wire Harness) on page 11-607*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B3265

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptors

DTC B3265: Trunk Lid Unlatch Output Circuit

For symptom byte information refer to: *Symptom Byte List on page 6-85*

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B3265 02	B3265 04	B3265 01	—
Ground	—	B3265 04	—	—

Circuit/System Description

When the Body Control Module (BCM) receives a liftgate release command, it will provide voltage to the relay. This will energize the relay causing the switch side of the relay to close and will then provide B+ voltage to the rear compartment lid latch.

Conditions for Running the DTC

- The system voltage is 9–16 V.
- When the relay is actively commanded by the BCM.

Conditions for Setting the DTC

B3265 01

The BCM detects a short to voltage in the Rear Compartment Lid Unlatch Relay control circuit.

B3265 02

The BCM detects a short to ground in the Rear Compartment Lid Unlatch Relay control circuit.

B3265 04

The BCM detects an open/high resistance in the Rear Compartment Lid Unlatch Relay control circuit or an open/high resistance in the relay ground circuit.

Action Taken When the DTC Sets

The rear compartment lid latch will be inoperative.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics on page 4-241

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Luggage Compartment Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the operation of the M40 Rear Compartment Lid Latch when commanding the Trunk Lid Unlatch with a scan tool.

⇒ **If the M40 Rear Compartment Lid Latch does not UNLATCH**

Refer to Circuit/System Testing.

⇓ **If the M40 Rear Compartment Lid Latch does UNLATCH**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the KR95B Rear Compartment Lid Unlatch Relay. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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. Connect a test lamp between the control circuit terminal 1 and the ground circuit terminal 2.
4. Verify the test lamp briefly turns ON and OFF when commanding the Trunk Lid Unlatch with a scan tool with a scan tool.

⇒ **If the test lamp is always OFF**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

4.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

5. Test or replace the KR95B Rear Compartment Lid Unlatch Relay.

Component Testing

Relay Test

1. Ignition OFF, disconnect the KR95B Rear Compartment Lid Unlatch Relay.
2. Test for 60–200 Ω between terminals 1 and 3.

⇒ **If less than 60 Ω or greater than 200 Ω**

Replace the KR95B Rear Compartment Lid Unlatch Relay.

⇓ **If between 60–200 Ω**

3. Test for infinite resistance between the terminals listed below:
   - 4 and 3
   - 4 and 5
   - 4 and 1
   - 5 and 1

⇒ **If less than infinite resistance**

Replace the KR95B Rear Compartment Lid Unlatch Relay.

⇓ **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal 3 and 12 V. Install a jumper wire between relay terminal 1 and ground.
5. Test for less than 2 Ω between terminals 4 and 5.

⇒ **If 2 Ω or greater**

Replace the KR95B Rear Compartment Lid Unlatch Relay.

⇓ **If less than 2 Ω**

6. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Relay Replacement (Within an Electrical Center) on page 11-607* or *Relay Replacement (Attached to Wire Harness) on page 11-607*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B3618

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptor

DTC B3618 00: Exterior Liftgate Unlatch Switch Circuit Malfunction

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B3618 00	1	1	—
Ground	—	1	—	—
1. Exterior Rear Compartment Lid Release Switch Malfunction				

Circuit/System Description

When the ignition is ON, the body control module (BCM) supplies a signal to the rear compartment lid unlatch switch through the trunk release switch signal circuit. When the exterior rear compartment lid release switch is pressed, the voltage within the signal circuit is pulled low and in response, the BCM will energize the trunk release relay.

Conditions for Running the DTC

The system voltage is 9–16 V.

Conditions for Setting the DTC

The BCM detects a short to ground in the rear compartment lid release switch signal circuit for greater than 60 seconds

Action Taken When the DTC Sets

The BCM ignores the input from the rear compartment lid unlatch switch.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics on page 4-241

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Luggage Compartment Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the rear compartment lid unlatch switch-exterior.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing.

⇓ **If the parameter changes**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S58A rear compartment lid unlatch switch-exterior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the K9 body control module.

4.2. Test for infinite resistance between the signal circuit terminal 1 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 body control module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, disconnect the harness connector at the K9 body control module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇓ **If Active**

7. Test or replace the S58A rear compartment lid unlatch switch-exterior.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S58A rear compartment lid unlatch switch-exterior.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S58A rear compartment lid unlatch switch-exterior.

⇓ **If infinite resistance**

3. Test for less than 3 Ω between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.

⇒ **If 3 Ω or greater**

Replace the S58A rear compartment lid unlatch switch-exterior.

⇓ **If less than 3 Ω**

4. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the diagnostic procedure.

- *Liftgate Release Switch Replacement on page 4-320*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

DTC B3930

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

DTC Descriptors

DTC B3930 01: Child Security Lock Motors Circuit Short to Battery
DTC B3930 02: Child Security Lock Motors Circuit Short to Ground
DTC B3930 04: Child Security Lock Motors Circuit Open

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B3930 01, B3930 04	B3930 01, B3930 04	—	—
Door Lock Security Relay Control	B3930 02	B3930 01, B3930 04	B3930 01, B3930 04	—
Underhood Fuse Block Ground	—	B3930 01, B3930 04	—	—

Circuit/System Description

The body control module controls the child security lock relay when it receives a command to lockout the rear doors. The relay will apply voltage to both child security circuits at the rear door latches to disable the interior rear door handles.

Conditions for Running the DTC

When the Door Lock relay is being actively commanded by the body control module.

Conditions for Setting the DTC

B3930 01

The body control module detects a short to voltage or an open/high resistance in the door lock security relay control circuit.

The body control module detects a an open/high resistance in the underhood fuse block ground circuit.

The body control module detects a short to ground or an open/high resistance in the body control module B+ circuit.

B3930 02

The BCM detects a short to ground in the door lock security relay control circuit.

B3930 04

The body control module detects a short to voltage or an open/high resistance in the door lock security relay control circuit.

The body control module detects a an open/high resistance in the underhood fuse block ground circuit.

The body control module detects a short to ground or an open/high resistance in the body control module B+ circuit.

Action Taken When the DTC Sets

- The interior rear door handles will always be disabled or will not lockout depending upon the latch states when the fault occurred
- The body control module will command the lockout indicator to flash ON and OFF for 30 seconds when the lockout switch is pressed to indicate a fault in the system.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics on page 4-238

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Circuit Testing on page 11-526*
- *Wiring Repairs on page 11-537*
- *Connector Repairs on page 11-548*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify both interior rear door handles do not open the rear doors when commanding the Child Security Lock Motors ON with a scan tool.

⇒ **If both interior door handles open the rear doors**

Refer to Circuit/System Testing.

⇓ **If both interior door handles do not open the rear doors**

3. Verify both interior rear door handles will open the rear doors when commanding the Child Security Lock Motors OFF with a scan tool.

⇒ **If both interior door handles do not open the rear doors**

Refer to Circuit/System Testing.

⇓ **If both interior door handles open the rear doors**

4. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the X2 harness connector at the X50A Fuse Block-Underhood. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal C5 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 OFF, connect the X2 harness connector at the X50A Fuse Block-Underhood. Disconnect the X4 harness connector at the K9 Body Control Module, ignition ON.
4. Verify that a test lamp does not illuminate between the control circuit terminal 8 and ground.

⇒ **If the test lamp illuminates**

4.1. Ignition OFF, remove the test lamp, disconnect the X2 harness connector at the X50A Fuse Block-Underhood.

4.2. Test for less than 1 V between the K9 Body Control Module control circuit terminal 8 X4 and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the X50A Fuse Block-Underhood.

⇓ **If the test lamp is not illuminated**

5. Connect a 3A fused jumper wire between the control circuit terminal 8 and B+.
6. Listen for an audible click from the X50A Fuse Block-Underhood as the KR113 Child Security Lock Disable Relay activates.

⇒ **If the KR113 Child Security Lock Disable Relay does not activate**

6.1. Ignition OFF, remove the jumper wire, disconnect the X2 harness connector at the X50A Fuse Block-Underhood.

6.2. Test for infinite resistance between the K9 Body Control Module control circuit terminal 8 X4 and ground.

⇒ If less than Infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the X50A Fuse Block-Underhood.

⇓ **If the KR113 Child Security Lock Disable Relay activates**

7. Replace the K9 Body Control Module.

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Front Compartment Fuse Block Replacement on page 11-609*
- *Control Module References on page 6-3* body control module replacement, programming and setup

Symptoms - Vehicle Access

Note: The following steps must be completed before using the symptom tables.

1. Perform the *Diagnostic System Check - Vehicle on page 6-66*.
   - There are no DTCs set
   - The control modules can communicate via the serial data link
2. Review the system operation in order to familiarize yourself with the system functions. Refer to the following systems description:
   - *Door Ajar Indicator Description and Operation on page 4-322*
   - *Luggage Compartment Description and Operation on page 4-322*
   - *Power Door Locks Description and Operation on page 4-323*

Visual/Physical Inspection

- Inspect for aftermarket devices which may affect the operation of the system. Refer to *Checking Aftermarket Accessories on page 11-525*.
- Inspect the easily accessible or visible system components for obvious damage or conditions which may cause the symptom.

Intermittent

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to *Testing for Intermittent Conditions and Poor Connections on page 11-531*.

Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- *Hatch Release Malfunction on page 4-264*
- *Power Door Child Lock Malfunction on page 4-271*
- *Door Ajar Indicator Malfunction on page 4-268*
- *Power Door Locks Malfunction on page 4-275*
- *Trunk Release Malfunction on page 4-280*
- *Door Will Not Open/Close, Door Binding, or Locks, Handles, or Cylinders Do Not Function on page 4-283*

Hatch Release Malfunction

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Liftgate Relay Switch B+	2	2	—	—
Liftgate Unlatch Switch Signal	B2494 00	1	1	—
Liftgate Relay Control Low	—	2	—	—
Liftgate Relay Control High	B3245 02	2	B324A 01	—
Liftgate Latch Ground	—	2	—	—
Liftgate Unlatch Switch Ground	—	1	—	—
1. Liftgate Release Switch Malfunction 2. Liftgate Release Malfunction				

Circuit/System Description

The liftgate unlatch switch is an input to the body control module (BCM). The BCM supplies a 12 V signal to the liftgate unlatch switch and when the switch is pressed, signal circuit voltage goes low. When the BCM receives a liftgate release signal it will monitor the status to the door latches. If the vehicle doors are locked, the BCM will ignore the request, if the doors are unlocked, the BCM will supply voltage and ground to the liftgate release relay coil, energizing the relay. When the relay is energized, battery voltage flows through the closed contacts of the relay to the liftgate latch assembly which activates allowing for the liftgate to be raised to the open position.

Diagnostic Aids

An intermittent short to ground in the liftgate unlatch switch Signal circuit may cause the BCM to command the liftgate to open if the vehicle is in park and the doors are unlocked. If the vehicle has a history of the liftgate opening unexpectedly, inspect the point where the wires enter the liftgate unlatch switch for corrosion or evidence of water intrusion.

Note: Verify all doors have been commanded UNLOCK with a scan tool prior to commanding the liftgate to unlatch

Reference Information

Schematic Reference

Release Systems Schematics on page 4-241

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Luggage Compartment Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the S46B Liftgate Unlatch Switch.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing — Liftgate Release Switch Inoperative

⇓ **If the parameter changes**

3. Verify the operation of the liftgate when commanding the M30 Liftgate Latch to UNLATCH by pressing the S46B Liftgate Unlatch Switch.

⇒ **If the M30 Liftgate Latch does not UNLATCH**

Refer to Circuit/System Testing — Liftgate Release Actuator Inoperative

⇓ **If the M30 Liftgate Latch does UNLATCH**

4. All OK.

Circuit/System Testing

Liftgate Release Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S46B Liftgate Unlatch Switch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the signal circuit terminal 1 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, remove the 3 A fused jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If Active**

7. Test or replace the S46B Liftgate Unlatch Switch.

Release Actuator Inoperative

1. Ignition OFF, disconnect the KR95A Liftgate Unlatch Relay. Ignition ON
2. Verify a test lamp illuminates between the B+ circuit terminal 3 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, 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.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

2.1. Ignition OFF.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance,

2.3. Disconnect the harness connector at the M30 Liftgate Latch.

2.4. Test for infinite resistance between the control circuit terminal 5 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the KR95A Liftgate Unlatch Relay

⇓ **If the test lamp illuminates**

3. Connect a test lamp between the control circuit terminal 1 and ground.
4. Ignition ON, verify the test lamp turns ON and OFF when pressing and releasing the S46B Liftgate Unlatch Switch.

⇒ **If the test lamp is always OFF**

4.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

4.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

4.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

5. Connect a test lamp between the control circuit terminal 2 and B+.
6. Verify the test lamp turns ON and OFF when pressing and releasing S46B Liftgate Unlatch Switch.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Ignition OFF.

6.4. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Verify that a test lamp does not illuminate between the control circuit terminal 5 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the control circuit

⇓ **If the test lamp does not illuminate**

8. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the M30 Liftgate Latch. It may take up to 2 minutes for all vehicle systems to power down.

9. Test for less than 10 Ω between the ground circuit terminal 1 and ground.

⇒ **If 10 Ω or greater**

9.1. Ignition OFF.

9.2. 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**

10. Connect the harness connector at the M30 Liftgate Latch
11. Ignition ON, connect a 10 A fused jumper wire between the B+ circuit terminal 3 and the control circuit terminal 5.
12. Verify the M30 Liftgate Latch is activated.

⇒ **If the M30 Liftgate Latch does not activate**

12.1. Ignition OFF, disconnect the harness connector at the M30 Liftgate Latch.

12.2. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the M30 Liftgate Latch.

⇓ **If the M30 Liftgate Latch activates**

13. Test or replace the KR95A Liftgate Unlatch Relay.

Component Testing

Liftgate Latch

1. Ignition OFF, disconnect the harness connector at the M30 Liftgate Latch.
2. Install a 10 A fused jumper wire between the control terminal 3 and 12 V. Install a jumper wire between the ground terminal 1 and ground.
3. Verify the M30 Liftgate Latch activates

⇒ **If the M30 Liftgate Latch does not activate.**

Replace the M30 Liftgate Latch.

⇓ **If the M30 Liftgate Latch does activate.**

4. All OK

Liftgate Release Switch

1. Ignition OFF, disconnect the harness connector at the S46B Liftgate Unlatch Switch.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S46B Liftgate Unlatch Switch.

⇓ **If infinite resistance**

3. Test for less than 3 Ω between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.

⇒ **If 3 Ω or greater**

Replace the S46B Liftgate Unlatch Switch.

⇓ **If less than 3 Ω**

4. All OK

Relay Test

1. Ignition OFF, disconnect the KR95A Liftgate Unlatch Relay.
2. Test for 60–200 Ω between terminals 1 and 3.

⇒ **If less than 60 Ω or greater than 200 Ω**

Replace the KR95A Liftgate Unlatch Relay.

⇓ **If between 60-200 Ω**

3. Test for infinite resistance between the terminals listed below:
   - 4 and 3
   - 4 and 5
   - 4 and 1
   - 5 and 1

⇒ **If less than infinite resistance**

Replace the KR95A Liftgate Unlatch Relay.

⇓ **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal 3 and 12 V. Install a jumper wire between relay terminal 1 and ground.
5. Test for less than 2 Ω between terminals 4 and 5.

⇒ **If 2 Ω or greater**

Replace the KR95A Liftgate Unlatch Relay.

⇓ **If less than 2 Ω**

6. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair procedure.

- *Relay Replacement (Within an Electrical Center) on page 11-607* or *Relay Replacement (Attached to Wire Harness) on page 11-607*
- *Liftgate Release Switch Replacement on page 4-320*
- *Liftgate Latch Replacement on page 4-295*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

Door Ajar Indicator Malfunction

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Ajar Switch Signal	1	2	1	—
Driver Door Latch Ground	—	2	—	—
Left Rear Door Ajar Switch Signal	1	2	1	—
Left Rear Door Latch Ground	—	2	—	—
Liftgate Ajar Switch Signal	1	2	2	—
Rear Compartment Lid Latch Ground	—	2	—	—
Passenger Door Ajar Switch Signal	1	2	1	—
Passenger Door Latch Ground	—	2	—	—
Right Rear Door Ajar Switch Signal	1	2	1	—
Right Rear Door Latch Ground	—	2	—	—
1. Ajar Indicator Always Illuminated 2. Ajar Indicator Inoperative When Door, Liftgate, Trunk Is Open				

Circuit/System Description

Depending upon if the vehicle is equipped with driver express up/down power windows or standard power windows, affects how the driver door ajar signal circuits are configured and monitored.

If the vehicle is equipped with driver express up/down power windows, the driver window motor provides a 12V signal to the driver door ajar switch signal circuit. The body control module (BCM) provides a 12V signal to each of the driver, passenger, rear door ajar switch signal circuits and the trunk/liftgate ajar signal circuit. The door ajar switches are integral to each door latch assembly and the trunk/liftgate ajar switch is integral to the liftgate latch and the rear compartment lid latch. When a door, trunk or liftgate is opened, the normally open ajar switch closes. With the ajar switch closed, ground is provided to the ajar switch signal circuit. The driver window motor and/or BCM the voltage drop and sends a serial data message to the instrument panel to display the door ajar indicator.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics on page 4-238

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Door Ajar Indicator Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Driver Door Ajar Switch parameter changes between Inactive and Active when opening and closing the driver door.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Door Ajar Switch

⇓ **If the parameter changes**

3. Verify the scan tool Passenger Door Ajar Switch parameter changes between Inactive and Active when opening and closing the passenger door.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Door Ajar Switch

⇓ **If the parameter changes**

4. Verify the scan tool Left Rear Door Ajar Switch parameter changes between Inactive and Active when opening and closing the left rear door.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Door Ajar Switch

⇓ **If the parameter changes**

5. Verify the scan tool Right Rear Door Ajar Switch parameter changes between Inactive and Active when opening and closing the right rear door.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Door Ajar Switch

⇓ **If the parameter changes**

6. Verify the scan tool Rear Closure Ajar Switch parameter changes between Inactive and Active when opening and closing the trunk or the rear hatch.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Trunk/Hatch Ajar Switch

⇓ **If the parameter changes**

7. All OK.

Circuit/System Testing

Door Ajar Switch

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate A23 door latch assembly. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal listed below and ground:
   - A23D door latch assembly-driver – ground circuit terminal 8
   - A23P door latch assembly-passenger – ground circuit terminal 3
   - A23LR door latch assembly-left rear – ground circuit terminal 8
   - A23RR door latch assembly-right rear – ground circuit terminal 3

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the appropriate scan tool Door Ajar Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the appropriate component listed below:
   - M74D window motor – driver (AXG)
   - K9 body control module (without AXG)

4.2. Test for infinite resistance between the signal circuit terminal listed below and ground.
   - A23D door latch assembly-driver – signal circuit terminal 6
   - A23P door latch assembly-passenger – signal circuit terminal 1
   - A23LR door latch assembly-left rear – signal circuit terminal 6
   - A23RR door latch assembly-right rear – signal circuit terminal 1

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the appropriate component.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal listed below and ground.
   - A23D door latch assembly-driver – signal circuit terminal 6
   - A23P door latch assembly-passenger – signal circuit terminal 1
   - A23LR door latch assembly-left rear – signal circuit terminal 6
   - A23RR door latch assembly-right rear – signal circuit terminal 1
6. Verify the scan tool Door Ajar Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, disconnect the harness connector at the appropriate component listed below, ignition ON.
   - M74D window motor – driver (AXG)
   - K9 body control module (without AXG)

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the appropriate component.

⇓ **If Active**

7. Test or replace the A23 door latch assembly.

Trunk/Hatch Ajar Switch

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the M40 rear compartment lid latch or the M30 liftgate latch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal listed below and ground.
   - M30 liftgate latch – ground circuit terminal 1
   - M40 rear compartment lid latch – ground circuit terminal 2

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Rear Closure Ajar Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the K9 body control module.

4.2. Test for infinite resistance between the signal circuit terminal 5 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 body control module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal and the ground circuit terminal listed below:
   - M30 liftgate latch – signal circuit terminal 2 and ground circuit terminal 1
   - M40 rear compartment lid latch – signal circuit terminal 4 and ground circuit terminal 2
6. Verify the scan tool Rear Closure Ajar Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, disconnect the harness connector at the K9 body control module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 body control module.

⇓ **If Active**

7. Test or replace the M40 rear compartment lid latch or the M30 liftgate latch.

Component Testing

1. Ignition OFF, disconnect the harness connector at the appropriate A23 door latch assembly.
2. Test for infinite resistance between the signal terminal and the ground terminals listed below with the switch in the open position.
   - A23D door latch assembly-driver – signal terminal 6 and ground terminal 8
   - A23P door latch assembly-passenger – signal terminal 1 and ground terminal 3
   - A23LR door latch assembly-left rear – signal terminal 6 and ground terminal 8
   - A23RR door latch assembly-right rear – signal terminal 1 and ground terminal 3

⇒ **If less than infinite resistance**

Replace the A23 door latch assembly.

⇓ **If infinite resistance**

3. Test for less than 3 Ω between the signal and the ground terminal listed below with the switch in the closed position.
   - A23D door latch assembly-driver – signal terminal 6 and ground terminal 8
   - A23P door latch assembly-passenger – signal terminal 1 and ground terminal 3
   - A23LR door latch assembly-left rear – signal terminal 6 and ground terminal 8
   - A23RR door latch assembly-right rear – signal terminal 1 and ground terminal 3

⇒ **If 3 Ω or greater**

Replace the A23 door latch assembly.

⇓ **If less than 3 Ω**

4. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the diagnostic procedure.

- *Front Side Door Latch Replacement on page 4-299*
- *Rear Side Door Latch Replacement on page 4-301*
- *Front Side Door Window Regulator Motor Replacement on page 4-43*
- *Liftgate Latch Replacement on page 4-295*
- *Rear Compartment Lid Latch Replacement on page 4-300*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

Power Door Child Lock Malfunction

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B3930 01, B3930 04	B3930 01, B3930 04	—	—
Child Security Door Lockout Signal	B252C 00	1	1	—
Left Rear Door Lock Status Signal	2	2	2	—
Right Rear Door Lock Status Signal	2	2	2	—
Door Lock Relay Control	B3930 02	B3930 01, B3930 04	B3930 01, B3930 04	—
Child Security Door Lockout Indicator Control	B252E 02	3	3	—
Left Rear Door Latch Lockout Control	B3125 02, B3130 02, B3135 02	1	1	—
Left Rear Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	1	1	—
Right Rear Door Latch Lockout Control	B3125 02, B3130 02, B3135 02	2	2	—
Right Rear Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	2	2	—
Door Lock Relay Ground	—	B3930 01, B3930 04	—	—
Left Rear Door Latch Ground	—	2	—	—
Right Rear Door Latch Ground	—	2	—	—
1. Child Door Lockout Switch Malfunction 2. Child Door Lockout Malfunction 3. Child Security Door Lockout Indicator Malfunction				

Circuit/System Description

The child door lockout switch on the front floor console controls the child locks on the rear doors. The lockout switch is an input to the Body Control Module (BCM) and the BCM controls the Door Lock relay. When the BCM detects a voltage drop on the child door lockout signal circuit, it will apply voltage to the Door Lock relay coil, this will energize the relay and the contact within the relay will then direct the voltage to lock the left rear and right rear child locks and then isolate them from the normal door lock system to prevent the rear doors from being opened by using the interior rear door handles. The BCM will then provide a ground for the lockout indicator causing the indicator to illuminate to notify the driver that the child door lockout system has been activated. If the BCM detects a fault in the child door lockout system, it will command the lockout indicator to flash ON and OFF for 30 seconds.

Reference Information

Schematic Reference

- *Door Lock/Indicator Schematics on page 4-238*
- *Interior Lights Dimming Schematics on page 4-91*

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Circuit Testing on page 11-526*
- *Wiring Repairs on page 11-537*
- *Connector Repairs on page 11-548*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Child Security Lock Motors Command parameter changes between On and Off when pressing the child lockout switch.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Lockout Switch Inoperative.

⇓ **If the parameter changes**

3. Verify the function of the child lockout indicator when commanding the Child Lockout Indicator ON and OFF with a scan tool.

⇒ **If the child lockout indicator is always ON or always OFF**

Refer to Circuit/System Testing – Lockout Indicator Malfunction.

⇓ **If the child lockout indicator turns ON and turns OFF**

4. Verify the operation of both interior rear door handles do not open the rear doors when commanding the Child Security Lock Motors ON with a scan tool.

⇒ **If both interior rear door handles open the rear doors**

Refer to Circuit/System Testing – Security Lockout Inoperative.

⇒ **If a single interior rear door handle opens the rear door**

Refer to Circuit/System Testing – Single Door Security Lockout Malfunction.

⇓ **If both interior door handles do not open the rear doors**

5. Verify the operation of both interior rear door handles will open the rear doors when commanding the Child Security Lock Motors OFF with a scan tool.

⇒ **If both interior rear door handles do not open the rear doors**

Refer to Circuit/System Testing – Security Lockout Inoperative.

⇒ **If a single interior rear door handle does not open the rear door**

Refer to Circuit/System Testing – Single Door Security Lockout Malfunction.

⇓ **If both interior door handles open the rear doors**

6. All OK.

Circuit/System Testing

Lockout Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S48E Multifunction Switch-Center Console. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 9 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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. Test for greater than 10 V between the signal circuit terminal 7 and ground.

⇒ **If 10 V or less**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the signal circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

4.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 10 V**

5. Test or replace the S48E Multifunction Switch-Center Console.

Lockout Indicator Malfunction

1. Ignition OFF, and all vehicle systems OFF, disconnect the harness connector at the S48E Multifunction Switch-Center Console.
2. Connect a test lamp between the control circuit terminal 8 and ground.

3. Ignition ON, verify the test lamp turns ON and OFF when commanding the LED Backlight Dimming ON and OFF with a scan tool.

⇒ **If the test lamp is always OFF**

3.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

3.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

3.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

3.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

3.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

4. Connect a test lamp between the control circuit terminal 6 and B+. Ignition ON

5. Verify the test lamp turns ON and OFF when commanding the Child Lockout Indicator ON and OFF with a scan tool.

⇒ **If the test lamp is always OFF**

5.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

5.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

5.3. Ignition OFF.

5.4. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

5.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

5.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

6. Test or replace the S48E Multifunction Switch-Center Console.

Security Lockout Inoperative

1. Ignition OFF, disconnect the X2 harness connector at the X50A Fuse Block-Underhood.

2. Test for less than 10 Ω between the ground circuit terminal C5 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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. Connect a test lamp between the control circuit terminal D5 and ground, ignition ON.

4. Verify the test lamp turns ON and OFF when commanding the Child Security Lock Motors ON and OFF with a scan tool.

⇒ **If the test lamp is always OFF**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

4.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

5. Replace the X50A Fuse Block-Underhood.

Single Door Security Lockout Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate rear A23 Door Latch Assembly. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal listed below and ground:
   - A23RR Door Latch Assembly-Right Rear — ground terminal 3
   - A23LR Door Latch Assembly-Left Rear — ground terminal 8

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Rear Child Security Lock Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the signal circuit terminal listed below and ground.
   - A23LR Door Latch Assembly-Left Rear — signal circuit terminal 9
   - A23RR Door Latch Assembly-Right Rear — signal circuit terminal 4

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminals listed below and ground:
   - A23LR Door Latch Assembly-Left Rear — signal circuit terminal 9
   - A23RR Door Latch Assembly-Right Rear — signal circuit terminal 4
6. Verify the scan tool Rear Child Security Lock Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If Active**

7. Connect a test lamp between control circuit terminals listed below, ignition ON.
   - A23LR Door Latch Assembly-Left Rear — control circuit terminal 4 and control circuit terminal 7
   - A23RR Door Latch Assembly-Right Rear — control circuit terminal 2 and control circuit terminal 9
8. Verify the test lamp turns ON and OFF when commanding the Child Security Lock Motors with a scan tool.

⇒ **If the test lamp remains OFF during either of the commands**

8.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

8.2. Test for infinite resistance between each control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON during each of the commands**

9. Test or replace the rear A23 Door Latch Assembly.

Component Testing

Child Security Lockout Switch Test

1. Ignition OFF, disconnect the harness connector at the S48E Multifunction Switch-Center Console.
2. Test for infinite resistance between the signal terminal 7 and the ground terminal 9 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S48E Multifunction Switch-Center Console.

⇓ **If infinite resistance**

3. Test for less than 3Ω between the signal terminal 7 and the ground terminal 9 with the switch in the closed position.

⇒ **If 3 Ω or greater**

Replace the S48E Multifunction Switch-Center Console.

⇓ **If less than 3 Ω**

4. All OK

Door Latch Test

1. Ignition OFF, disconnect the harness connector at the appropriate rear A23 Door Latch Assembly.
2. Install a 30 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the rear A23 Door Latch Assembly should perform the LOCK and UNLOCK functions.

⇒ **If the function does not perform the LOCK and UNLOCK function**

Replace the rear A23 Door Latch Assembly.

⇓ **If the function performs the LOCK and UNLOCK function**

3. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Rear Side Door Latch Replacement on page 4-301*
- *Front Floor Console Multifunction Switch Replacement on page 8-105*
- *Front Compartment Fuse Block Replacement on page 11-609*
- *Control Module References on page 6-3* BCM replacement, programming and setup

Power Door Locks Malfunction

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B3125 02, B3130 02, B3135 02	B3125 02, B3130 02, B3135 02	—	—
Door Lock Switch Signal	B3150 00	1	1	—
Door Unlock Switch Signal	B3140 00	1	1	—
Driver Door Unlock Control	B3125 02, B3130 02, B3135 02	2	2	—
Doors Lock Control	B3125 02, B3130 02, B3135 02	2, 3, 4	2, 3, 4	—
Passenger Doors Unlock Control	B3125 02, B3130 02, B3135 02	3, 4	3, 4	—
Driver Door Lock Switch Ground	—	1	—	—

1. Driver Door Lock Switch Malfunction
2. Driver Door Unlock Malfunction
3. Door Unlock Malfunction
4. Door Lock Malfunction

Circuit/System Description

The Body Control Module (BCM) powers the reversible door latch assemblies by providing battery positive voltage and ground to the appropriate lock and unlock control circuits of the door latch assemblies. The lock and unlock control circuits of the rear doors and passenger door latch assemblies are all connected together. When the door latch assemblies are not active, all actuator lock and unlock control circuits are supplied a floating voltage door driver by the BCM. Transitioning of the lock actuators to the lock or unlocked position depends upon which control circuits receive voltage and which control circuits receive ground.

The BCM supplies a 12 V signal to each of the door lock and door unlock signal circuits. When the door lock switches are in the open position, the voltage level in the signal circuit will be near 12 V. When any door lock switch is pressed to the lock or unlock position, the voltage level in the appropriate signal circuit will drop to 0 V and the BCM will detect the voltage drop and command the door latches to perform the requested lock or unlock command.

The underhood fuse block contains a PCB relay which controls the functions of the electronic child locks which is part of the rear door latch assemblies. When the relay is in it's inactive state and the BCM commands the latches to LOCK and UNLOCK, voltage will pass through the relay contacts for normal LOCK and UNLOCK functions of the passenger, left rear and right rear door latch assemblies

Diagnostic Aids

Verify the smooth and consistent mechanical operation of each part of the door latch system prior to performing extensive electrical diagnostics

Any door that does not function smoothly or consistently, refer to *Door Will Not Open/Close, Door Binding, or Locks, Handles, or Cylinders Do Not Function on page 4-283.*

Reference Information

Schematic Reference

- *Door Lock/Indicator Schematics on page 4-238*
- *Body Control System Schematics on page 11-8*

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Power Door Locks Description and Operation on page 4-323

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Central Door Lock Switch on Console parameter changes from Inactive to Lock and Unlock when cycling the S13D Door Lock Switch-Driver between LOCK and UNLOCK.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Door Lock Switch Malfunction.

⇓ **If the parameter changes**

3. Verify all vehicle doors Lock and Unlock when commanding the All Doors Lock/Unlock with a scan tool.

⇒ **If only the driver door LOCK or UNLOCK functions do not work**

Refer to Circuit/System Testing – Driver Door Lock Malfunction.

⇒ **If one or more, but not all, passenger door LOCK or UNLOCK functions do not work**

Refer to Circuit/System Testing – Passenger Door Lock Malfunction.

⇒ **If all door LOCK and UNLOCK functions do not work**

Refer to Circuit/System Testing – All Door Lock Inoperative.

⇓ **If the LOCK and UNLOCK function for all doors works**

4. All OK.

Circuit/System Testing

Door Lock Switch Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S13D Door Lock Switch-Driver. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 1 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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. Test for greater than 10 V between the signal circuit terminal 3 and ground.

⇒ **If 10 V or less**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the signal circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

4.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 10 V**

5. Test for greater than 10 V between the signal circuit terminal 4 and ground.

⇒ **If 10 V or less**

5.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

5.2. Test for infinite resistance between the signal circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

5.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 10 V**

6. Test or replace the S13D Door Lock Switch-Driver.

Driver Door Lock Malfunction

1. Ignition OFF, verify the harness connector is firmly seated and secure for the A23D Door Latch Assembly-Driver.

⇒ **If the harness connector not seated or secure**

Firmly seat and secure the harness connector at the A23D Door Latch Assembly-Driver.

⇓ **If the harness connector is firmly seated and secure**

2. Disconnect the harness connector at the A23D Door Latch Assembly–Driver. Ignition ON.

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

3. Test for greater than 7 V between the control circuit terminal 3 and ground.

⇒ **If 7 V or less**

3.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

3.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

3.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance on the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

4. Test for greater than 7 V between the control circuit terminal 2 and ground.

⇒ **If 7 V or less**

4.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance on the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

5. Test or replace the A23D Door Latch Assembly–Driver.

Passenger Door Lock Malfunction

1. Ignition OFF, verify the harness connector is firmly seated and secure for the appropriate passenger or rear A23 Door Latch Assembly.

⇒ **If the harness connector not seated or secure**

Firmly seat and secure the harness connector at the passenger or rear A23 Door Latch Assembly.

⇓ **If the harness connector is firmly seated and secure**

2. Disconnect the harness connector at the appropriate passenger or rear A23 Door Latch Assembly. Ignition ON.

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

3. Test for greater than 7 V between the control circuit terminal listed below and ground:
   - A23P Door Latch Assembly-Passenger — control circuit terminal 7
   - A23RR Door Latch Assembly-Right Rear — control circuit terminal 7
   - A23LR Door Latch Assembly-Left Rear — control circuit terminal 2

⇒ **If 7 V or less**

3.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

3.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

3.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance on the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

4. Test for greater than 7 V between the control circuit terminal listed below and ground:
   - A23P Door Latch Assembly-Passenger — control circuit terminal 8
   - A23RR Door Latch Assembly-Right Rear — control circuit terminal 8
   - A23LR Door Latch Assembly-Left Rear — control circuit terminal 3

⇒ **If 7 V or less**

4.1. Ignition OFF, disconnect the X2 harness connector at the X50A Fuse Block-Underhood.

4.2. Disconnect the X6 harness connector at the K9 Body Control Module.

4.3. Test for less than 2 Ω between the control circuit terminals listed below:
   - X50A Fuse Block-Underhood control circuit terminal B7 X2 and A23P Door Latch Assembly-Passenger control circuit terminal 8
   - X50A Fuse Block-Underhood control circuit terminal B4 X2 and K9 Body Control Module control circuit terminal 2 X6

⇒ If greater than 2 Ω, repair the open/high resistance on the circuit.

4.1. Connect the X2 harness connector at the X50A Fuse Block-Underhood

4.2. Test for less than 2 Ω between the A23P Door Latch Assembly-Passenger control circuit terminal 8 and the K9 Body Control Module control circuit terminal 2 X6

⇒ If greater than 2 Ω, replace the X50A Fuse Block-Underhood.

4.1. Connect the X6 harness connector at the K9 Body Control Module

4.2. Ignition ON, test for greater than 7 V between the A23P Door Latch Assembly-Passenger control circuit terminal 8 and ground

⇒ **If 7 V or less, replace the K9 Body Control Module**

⇓ **If greater than 7 V**

5. Test or replace the A23 Door Latch Assembly.

All Door Locks Inoperative

1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module, ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, 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.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

2.1. Ignition OFF.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

2.3. Disconnect the harness connector at each of the A23 Door Latch Assemblies.

2.4. Test for infinite resistance between each control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the appropriate A23 Door Latch Assembly.

⇓ **If the test lamp illuminates**

3. Ignition OFF, connect the X2 harness connector at the K9 Body Control Module. Disconnect the harness connector at the A23D Door Latch Assembly-Driver, ignition ON.

Note: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

4. Test for greater than 7 V between the control circuit terminal 2 and ground.

⇒ **If 7 V or less**

4.1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit terminal listed below and ground:

- Control circuit terminal 1 X6
- Control circuit terminal 2 X6
- Control circuit terminal 4 X6

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If greater than 7 V**

5. Replace the K9 Body Control Module.

Component Testing

Central Door Lock Switch

1. Ignition OFF, disconnect the harness connector at the S13D Door Lock Switch-Driver.
2. Test for infinite resistance between the signal terminal 3 and the ground terminal 1 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S13D Door Lock Switch-Driver.

⇓ **If infinite resistance**

3. Test for infinite resistance between the signal terminal 4 and the ground terminal 1 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S13D Door Lock Switch-Driver

⇓ **If infinite resistance**

4. Test for less than 2 Ω between the signal terminal 4 and the ground terminal 1 with the switch in the Lock position.

⇒ **If 2 Ω or greater**

Replace the S13D Door Lock Switch-Driver.

⇓ **If less than 2 Ω**

5. Test for less than 2 Ω between the signal terminal 3 and the ground terminal 1 with the switch in the Unlock position.

⇒ **If 2 Ω or greater**

Replace the S13D Door Lock Switch-Driver.

⇓ **If less than 2 Ω**

6. All OK

Door Latch Assembly

1. Ignition OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
2. Install a 25 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the A23 Door Latch Assembly should perform the LOCK and UNLOCK function.

⇒ **If the actuator does not perform the LOCK and UNLOCK function**

Replace the A23 Door Latch Assembly.

⇓ **If the actuator performs the LOCK and UNLOCK function**

3. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Door Lock Switch Replacement on page 4-321*
- *Front Side Door Latch Replacement on page 4-299*
- *Rear Side Door Latch Replacement on page 4-301*
- *Front Compartment Fuse Block Replacement on page 11-609*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

Trunk Release Malfunction

Diagnostic Instructions

- Perform the *Diagnostic System Check - Vehicle on page 6-66* prior to using this diagnostic procedure.
- Review *Strategy Based Diagnosis on page 6-58* for an overview of the diagnostic approach.
- *Diagnostic Procedure Instructions on page 6-59* provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Rear Compartment Relay Switch B+	2	2	—	—
Rear Compartment Unlatch Switch Signal	B361800	1	1	—
Rear Compartment Relay Control	B326502	B326504	B326501	—
Rear Compartment Relay Ground	—	B326504	—	—
Rear Compartment Lid Latch Control	2	2	2	—
Rear Compartment Lid Latch Ground	—	2	—	—
Rear Compartment Unlatch Switch Ground	—	1	—	—
1. Rear Compartment Lid Release Switch Malfunction 2. Rear Compartment Lid Latch Malfunction				

Circuit/System Description

The rear compartment lid unlatch switch is an input to the Body Control Module (BCM). The BCM supplies a 12 V signal to the rear compartment lid unlatch switch and when the switch is pressed, signal circuit voltage goes low. When the BCM receives a trunk release signal it will monitor the status to the door latches. If the vehicle doors are locked, the BCM will ignore the request, if the doors are unlocked, the BCM will supply voltage and ground to the rear compartment lid release relay coil, energizing the relay. When the relay is energized, battery voltage flows through the closed contacts of the relay to the rear compartment lid latch which activates allowing for the trunk lid to be raised to the open position.

Diagnostic Aids

An intermittent short to ground in the rear compartment lid unlatch switch circuit may cause the BCM to command the trunk to open if the vehicle is in park and the doors are unlocked. If the vehicle has a history of the trunk opening unexpectedly, inspect the point where the wires enter the rear compartment lid unlatch switch for corrosion or evidence of water intrusion.

Reference Information

Schematic Reference

Release Systems Schematics on page 4-241

Connector End View Reference

Component Connector End Views on page 11-269

Description and Operation

Luggage Compartment Description and Operation on page 4-322

Electrical Information Reference

- *Circuit Testing on page 11-526*
- *Connector Repairs on page 11-548*
- *Testing for Intermittent Conditions and Poor Connections on page 11-531*
- *Wiring Repairs on page 11-537*

Scan Tool Reference

Control Module References on page 6-3 for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the S58A Rear Compartment Lid Unlatch Switch-Exterior.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing — Trunk Release Switch Inoperative

⇓ **If the parameter changes**

3. Verify the operation of the M40 Rear Compartment Lid Latch when commanding the Trunk Lid Unlatch with a scan tool.

⇒ **If the M40 Rear Compartment Lid Latch does not UNLATCH**

Refer to Circuit/System Testing — Release Actuator Inoperative

⇓ **If the M40 Rear Compartment Lid Latch does UNLATCH**

4. All OK.

Circuit/System Testing

Trunk Release Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.

⇒ **If not Inactive**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the signal circuit terminal 1 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.

⇒ **If not Active**

6.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If Active**

7. Test or replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

Release Actuator Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the KR95B Rear Compartment Lid Unlatch Relay. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. 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 a test lamp illuminates between the B+ circuit terminal 3 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

4.1. Ignition OFF.

4.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, 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.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

4.1. Ignition OFF.

4.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance,

4.3. Disconnect the harness connector at the M40 Rear Compartment Lid Latch.

4.4. Test for infinite resistance between the control circuit terminal 5 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the KR95B Rear Compartment Lid Unlatch Relay

⇓ **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal 1 and the ground circuit terminal 2.
6. Verify the test lamp briefly turns ON when commanding the Trunk Lid Unlatch with a scan tool.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Verify that a test lamp does not illuminate between the control circuit terminal 5 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the control circuit

⇓ **If the test lamp does not illuminate**

8. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the M40 Rear Compartment Lid Latch. It may take up to 2 minutes for all vehicle systems to power down.
9. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

9.1. Ignition OFF.

9.2. 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**

10. Connect the harness connector at the M40 Rear Compartment Lid Latch
11. Ignition ON, connect a 10 A fused jumper wire between the B+ circuit terminal 3 and the control circuit terminal 5.
12. Verify the M40 Rear Compartment Lid Latch is activated.

⇒ **If the M40 Rear Compartment Lid Latch does not activate**

12.1. Ignition OFF, disconnect the harness connector at the M40 Rear Compartment Lid Latch.

12.2. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the M40 Rear Compartment Lid Latch.

⇓ **If the M40 Rear Compartment Lid Latch activates**

13. Test or replace the KR95B Rear Compartment Lid Unlatch Relay.

Component Testing

Rear Compartment Lid Latch

1. Ignition OFF, disconnect the harness connector at the M40 Rear Compartment Lid Latch.
2. Install a 10 A fused jumper wire between the control terminal 1 and 12 V. Install a jumper wire between the ground terminal 2 and ground.
3. Verify the M40 Rear Compartment Lid Latch activates

⇒ **If the M40 Rear Compartment Lid Latch does not activate.**

Replace the M40 Rear Compartment Lid Latch.

⇓ **If the M40 Rear Compartment Lid Latch does activate.**

4. All OK

Trunk Release Switch

1. Ignition OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.

⇒ **If less than infinite resistance**

Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

⇓ **If infinite resistance**

3. Test for less than 3 Ω between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.

⇒ **If 3 Ω or greater**

Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

⇓ **If less than 3 Ω**

4. All OK

Relay Test

1. Ignition OFF, disconnect the KR95B Rear Compartment Lid Unlatch Relay.
2. Test for 60–200 Ω between terminals 1 and 3.

⇒ **If less than 60 Ω or greater than 200 Ω**

Replace the KR95B Rear Compartment Lid Unlatch Relay.

⇓ **If between 60-200 Ω**

3. Test for infinite resistance between the terminals listed below:
   - 4 and 3
   - 4 and 5
   - 4 and 1
   - 5 and 1

⇒ **If less than infinite resistance**

Replace the KR95B Rear Compartment Lid Unlatch Relay.

⇓ **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal 3 and 12 V. Install a jumper wire between relay terminal 1 and ground.
5. Test for less than 2 Ω between terminals 4 and 5.

⇒ **If 2 Ω or greater**

Replace the KR95B Rear Compartment Lid Unlatch Relay.

⇓ **If less than 2 Ω**

6. All OK

Repair Instructions

Perform the *Diagnostic Repair Verification on page 6-92* after completing the repair.

- *Relay Replacement (Within an Electrical Center) on page 11-607* or *Relay Replacement (Attached to Wire Harness) on page 11-607*
- *Rear Compartment Lid Latch Replacement on page 4-300*
- *Liftgate Release Switch Replacement on page 4-320*
- *Control Module References on page 6-3* for BCM replacement, programming and setup

Door Will Not Open/Close, Door Binding, or Locks, Handles, or Cylinders Do Not Function

Step	Action	Yes	No
DEFINITION: This diagnostic table is designed to address the mechanical diagnosis of the door latching system, which could include the inside and outside handles, latch rods/cables, latches, or latch cylinders.			
1	Did you perform the Diagnostic System Check – Vehicle?	Go to *Step 2*	Go to *Diagnostic System Check - Vehicle on page 6-66*
2	Were you sent here from a Vehicle Access Symptom Table?	Go to *Step 3*	Go to *Symptoms - Vehicle Access on page 4-264*
3	Does the door open with the outside handle?	Go to *Step 4*	Go to *Step 10*
4	Does the door open with the inside handle?	Go to *Step 5*	Go to *Step 11*
5	Does the manual latch knob latch and unlatch the latch smoothly without binding?	Go to *Step 6*	Go to *Step 12*
6	Does the door latch switch and/or the keyless entry transmitter latch and unlatch the door latch or door latches?	Go to *Step 7*	Go to *Step 14*
7	Is the outside key cylinder loose or does it rattle or fall out? (if equipped)	Go to *Step 15*	Go to *Step 8*
8	Does the outside key cylinder latch and unlatch the latch and function smoothly without binding? (if equipped)	Go to *Step 9*	Go to *Step 16*
9	Does the door bind, does it take excessive effort to open, or is it misaligned?	Go to *Step 17*	Go to *Step 18*

Door Will Not Open/Close, Door Binding, or Locks, Handles, or Cylinders Do Not Function (cont'd)

Step	Action	Yes	No
10	If the door will not open with the outside handle, or the handle is obstructed or loose, check the following: • For cold weather freezing, thaw as necessary. • Check the handle for foreign material. Remove material as necessary. • Check the handle grab bar for looseness or damage. Repair as necessary. • Check the handle for full travel. If the issue is not resolved, remove the trim panel as necessary to gain access to door hardware and check the following: • Check the handle chassis for loose fasteners, broken chassis inserts, loose or missing spring, or a loose, missing or bent rod lever. • Check for bent rod to the outside handle. • Check that the handle grab bar engages the rod lever properly. • Check for interference of rod and handle to other components in the door. • Check that handle rod is securely attached at both latch and handle. • Check if rod is positioned properly in the clip on the latch. At rest position, the handle should be fully against the down stop and the latch lever should be at the bottom of its travel. Correct by opening clip, repositioning rod in clip and closing clip till it snaps, as necessary. Did you find and correct the condition?	Go to *Step 18*	Go to *Step 11*
11	Door will not open with the inside handle: • Check the inside handle for foreign material. Remove material as necessary. • Check that the handle is secure. Correct as necessary. • If rear door, verify child security is not engaged. • Remove the trim panel as necessary to and check the inside handle rod/cable attachments at both the latch and handle. If the cable is kinked or pinched, correct as necessary. Did you find and correct the condition?	Go to *Step 18*	Go to *Step 12*
12	The door will not or is difficult to unlatch with the inside manual latch knob: • For cold weather freezing, thaw as necessary • Check the latch knob for a loose condition. Repair or replace as necessary. Check the latch knob for binding or dragging using the following procedure: 1. Remove the latch knob. 2. If condition goes away, check for drag/interference of the latch knob against the inner belt seal, or the trim panel. Correct as required. If further action is required, remove the trim panel and check the latch rod and latch knob for interference with the following: • Water deflector/paper • Side impact foam • Rod grommet in sheet metal • Glass run channel • Other rods or cables • Trim panel Did you find and correct the condition?	Go to *Step 18*	Go to *Step 13*

Door Will Not Open/Close, Door Binding, or Locks, Handles, or Cylinders Do Not Function (cont'd)

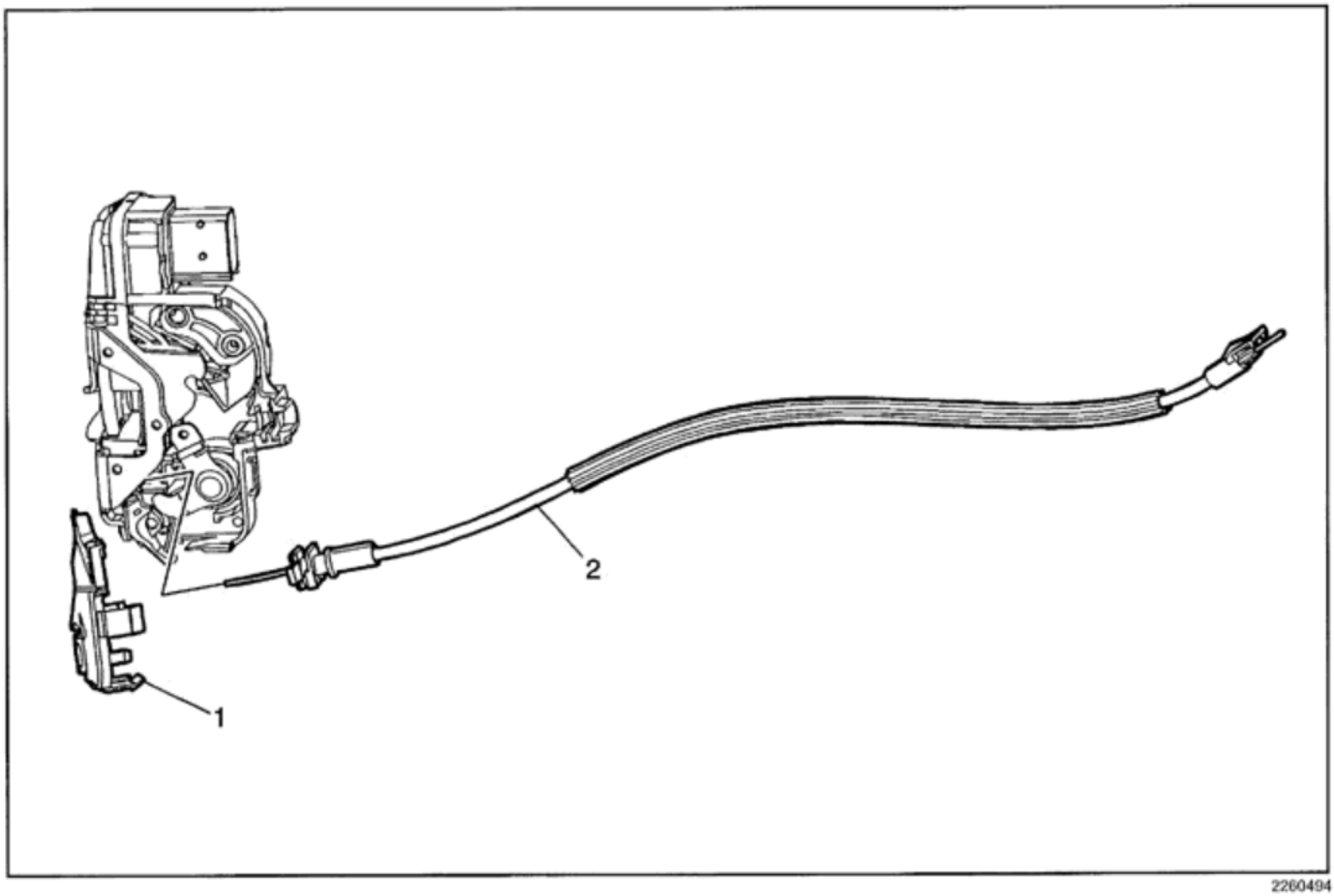
Step	Action	Yes	No
13	With a manual lock, if the latch will not function properly do the following: 1. Function the lock/unlatch lever on the latch to unlatch the latch. Check for high internal resistance. 2. With the door open, manually close the latch with a screwdriver. 3. Check the latch for internal binding by actuating the latch with the inside door handle lever. 4. Manually close the latch with a screwdriver again. 5. Check the latch for internal binding by actuating the latch with the outside door handle lever. Did you find and correct the condition?	Go to *Step 18*	Go to *Step 14*
14	If power locks are included in vehicle options and do not function with either the keyless entry transmitter or switch: 1. For cold weather freezing, thaw as necessary. 2. Remove trim pad as required and check the following: • Verify door harness has appropriate power connectors for switches and latch. • Check harness connector pins for corrosion. • Assure wire harness connectors are seated and locked properly at latch and switch. Remove and re-seat if required. • Check door harness for cuts/chafing/corrosion. Correct/replace as required. • Check for 12V at latch and door switch. Correct/proceed accordingly. • Check BCM for trouble codes. Correct/proceed accordingly. 3. If power locks still do not function do the following: 3.1. Remove latch from door cavity. 3.2. Connect latch to electrical connector outside the door. 3.3. Function power lock/unlatch switch in both latch and unlatch directions. Watch for lock/unlatch lever on latch to move completely from one position to the other. 3.4. If lever does not move, remove connector from old latch and attach to new latch outside of door cavity. 3.5. Verify new latch is functional, if so, attach rods and install new latch in door. Did you find and correct the condition?	Go to *Step 18*	Go to *Step 15*
15	If the key cylinder is loose do the following: • Remove the trim if necessary. • Check that the retaining clip is properly seated. (if equipped) • Check that the fastener is properly torqued. (if equipped) Did you find and correct the condition?	Go to *Step 18*	Go to *Step 16*

Door Will Not Open/Close, Door Binding, or Locks, Handles, or Cylinders Do Not Function (cont'd)

Step	Action	Yes	No
16	The outside key cylinder will not latch and unlatch the latch and function smoothly without binding: 1. For cold weather freezing, thaw as necessary 2. Remove trim if required. 3. Check that the key cylinder rod is securely attached both to the key cylinder pawl and the latch. 4. Check that key cylinder lever, rod and latch lever are free of interferences. Remove interferences as required. 5. Check that latch cylinder rod is routed properly. Re-route as required. 6. Remove rod from latch cylinder and actuate cylinder. Check for internal resistance. Lubricate latch cylinder as required 7. Verify Cylinder rotates with vehicle key. If not, code and replace cylinder to match vehicle key. See latch cylinder coding and replacing. Did you find and correct the condition?	Go to *Step 18*	Go to *Step 17*
17	The door is difficult to open: • Check for interference with the fender, adjacent door, body opening or door striker and adjust as necessary. • Check for binding door hinges. Lubricate or align/adjust as necessary. • Check the door check link for binding. Lubricate as necessary. • Adjust the door as necessary. Did you find and correct the condition?	Go to *Step 18*	Go to *Front Side Door Adjustment on page 3-10* or *Rear Side Door Adjustment (4 Door Notch Back 69) on page 3-12*
18	Verify proper operation of the door closing system. • Outside handle • Inside handle • Manual lock/unlatch – Outside key cylinder – Inside latch knob – Double pull handle • Power lock/unlatch – Key fob – Door switches • Door opening/closing effort Is the condition still present?	Go to *Step 1*	System OK

Repair Instructions

Front Side Door Inside Handle Cable Replacement

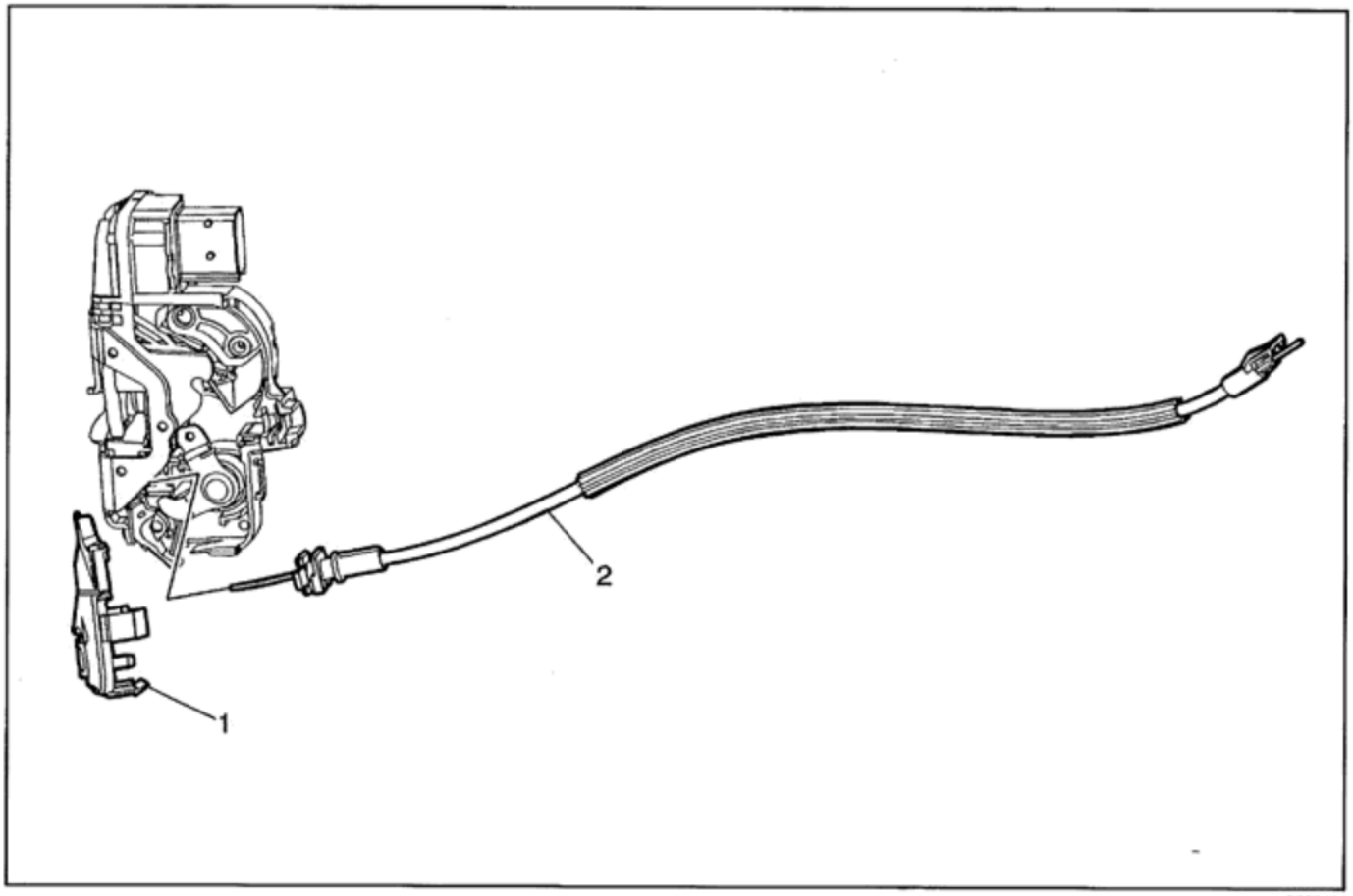


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Front Side Door Inside Handle Cable Replacement

Callout	Component Name
Preliminary Procedure Remove the front side door latch. Refer to *Front Side Door Latch Replacement on page 4-299*.	
1	Front Side Door Inside Handle Cable Cover **Tip:** Open the inside handle cable cover to access the release.
2	Front Side Door Inside Handle Cable

Rear Side Door Inside Handle Cable Replacement

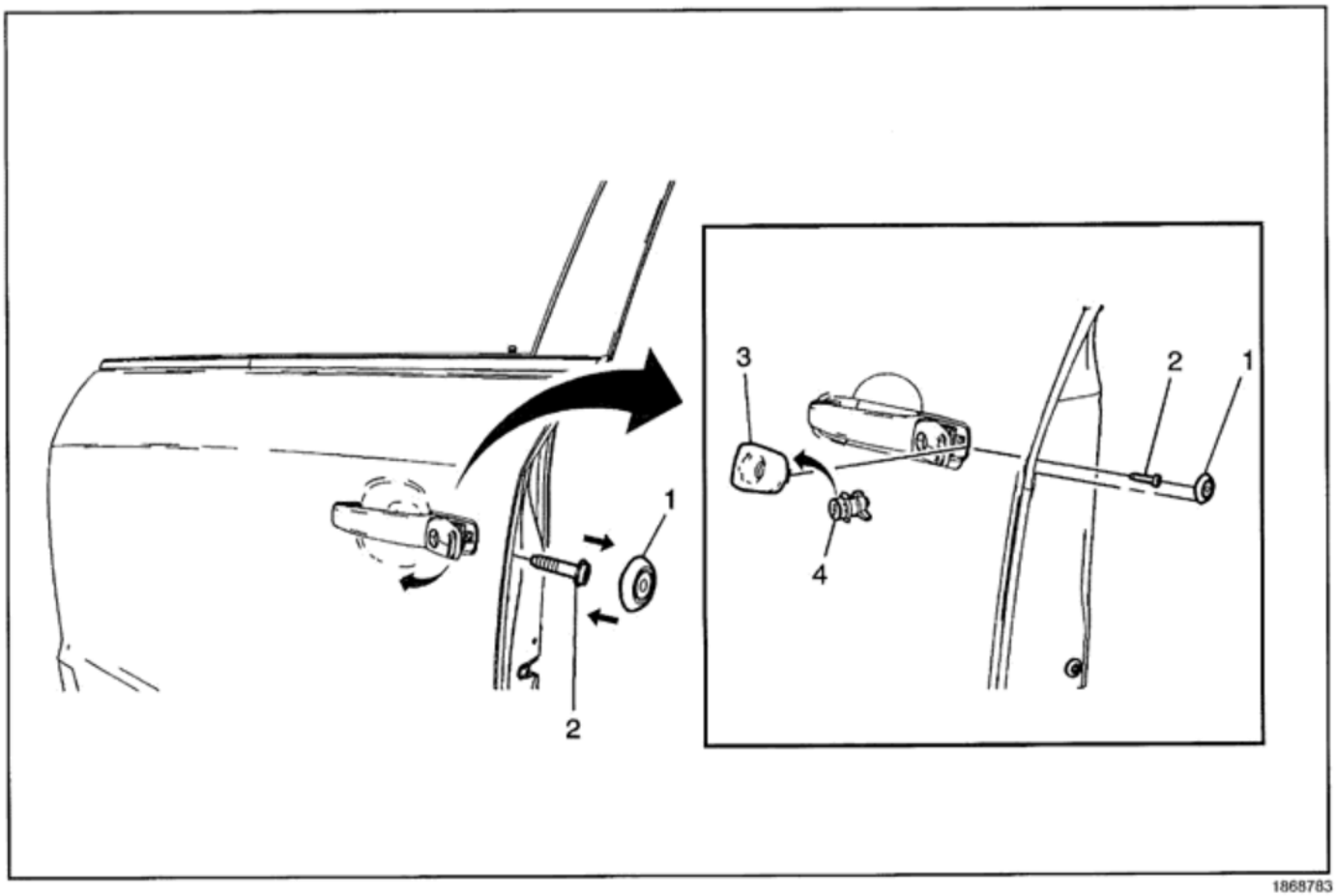


2260494

Rear Side Door Inside Handle Cable Replacement

Callout	Component Name
Preliminary Procedure Remove the rear side door latch. Refer to *Rear Side Door Latch Replacement on page 4-301*.	
1	Rear Side Door Inside Handle Cable Cover **Tip:** Open the inside handle cable cover to access the release.
2	Rear Side Door Inside Handle Cable

Front Side Door Lock Cylinder Replacement

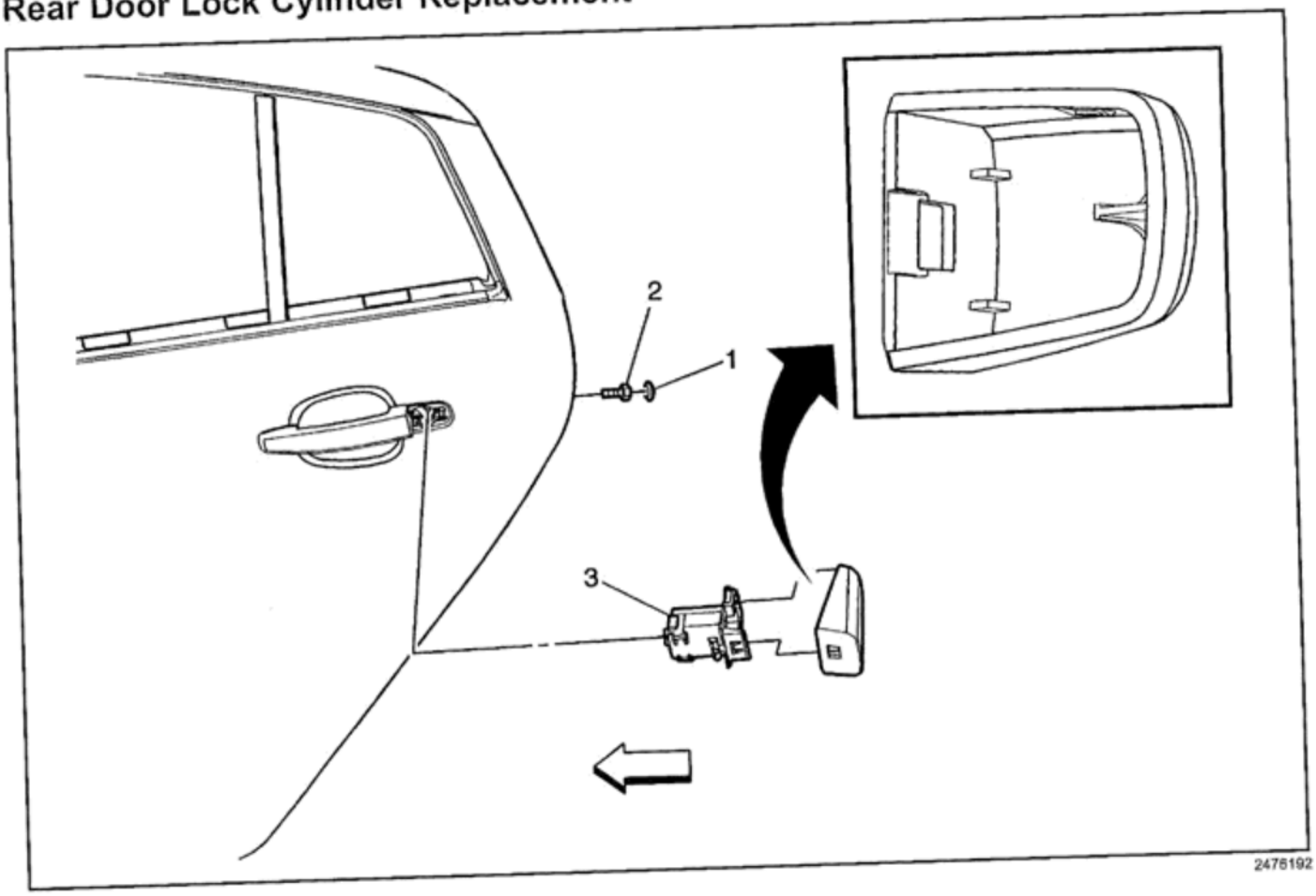


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Front Side Door Lock Cylinder Replacement

Callout	Component Name
1	Front Side Door Lock Cylinder Screw Access Plug **Tip:** Use the appropriate tool, remove the plug.
2	Front Side Door Lock Cylinder Clamp Screw **Caution:** Refer to *Fastener Caution on page 0-8*. **Procedure** Do Not remove the cylinder clamp screw completely from the housing, unscrew the screw to a hard stop, releasing the cylinder from the housing. **Tip:** It is not necessary to remove the outside door handle or housing to replace the lock cylinder. **Tighten** 5 N•m (44 lb in)
3	Front Side Door Lock Cylinder Cover **Procedure** Remove the lock cylinder cover. Refer to *Front Side Door Lock Cylinder Opening Cover Replacement on page 4-302*.
4	Front Side Door Lock Cylinder **Procedure** 1. Ensure that the lock cylinder gasket is in place when installing the lock cylinder to the handle. 2. Inspect the lock cylinder for proper operation.

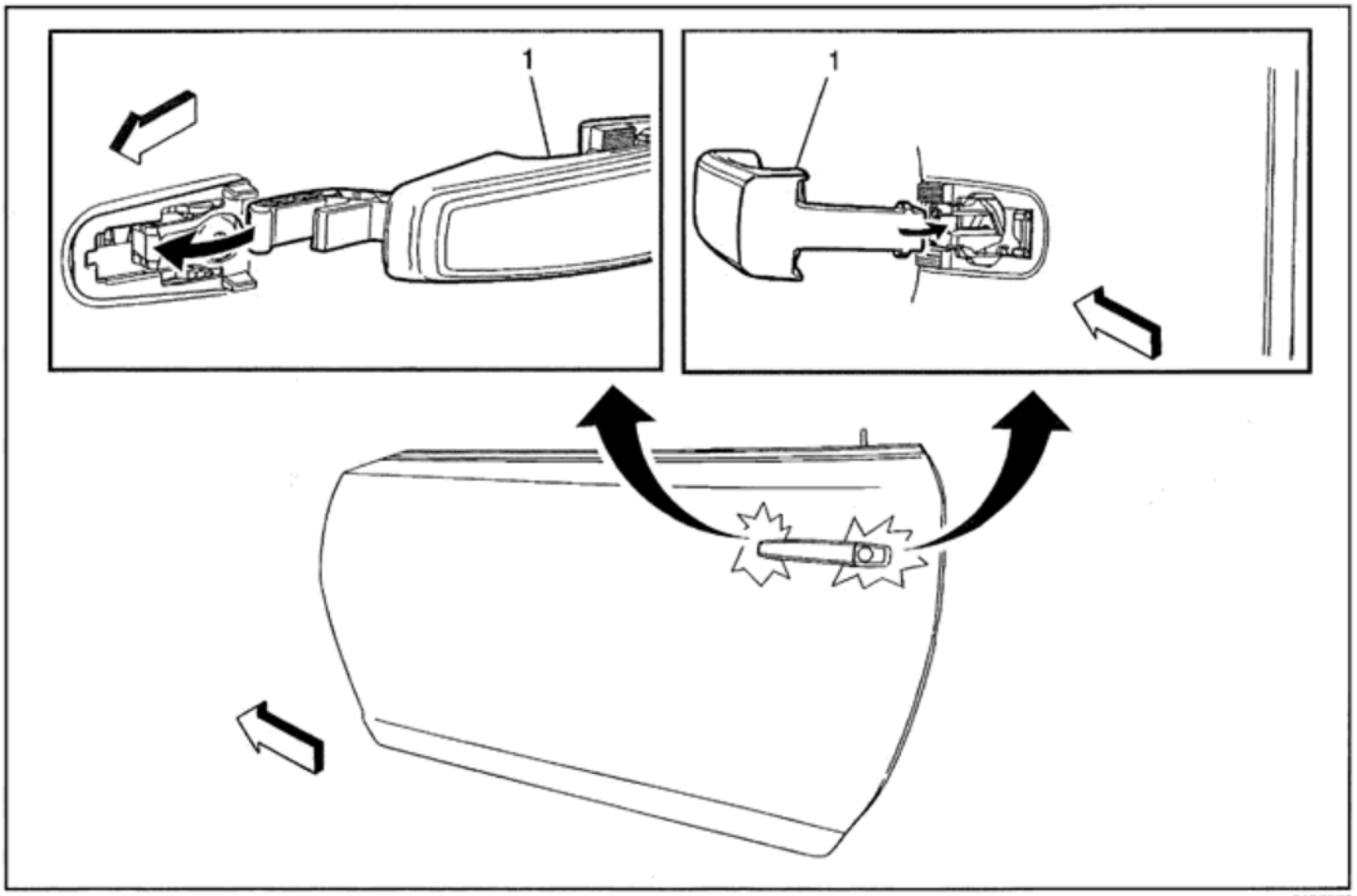
Rear Door Lock Cylinder Replacement



Rear Door Lock Cylinder Replacement

Callout	Component Name
1	Rear Side Door Lock Cylinder Opening Cover Screw Access Plug **Tip:** Use a flat-bladed tool to remove the cover.
2	Rear Side Door Lock Cylinder Clamp Screw **Caution:** Refer to *Fastener Caution on page 0-8*. **Procedure** Do Not remove the cylinder screw completely from the housing. unscrew the screw to a hard stop, remove the cylinder. **Tighten** 5 N•m (44 lb in)
3	Rear Side Door Lock Cylinder **Procedure** Remove the lock cylinder cover. Refer to *Rear Side Door Lock Cylinder Opening Cover Replacement on page 4-303*.

Front Side Door Outside Handle Replacement



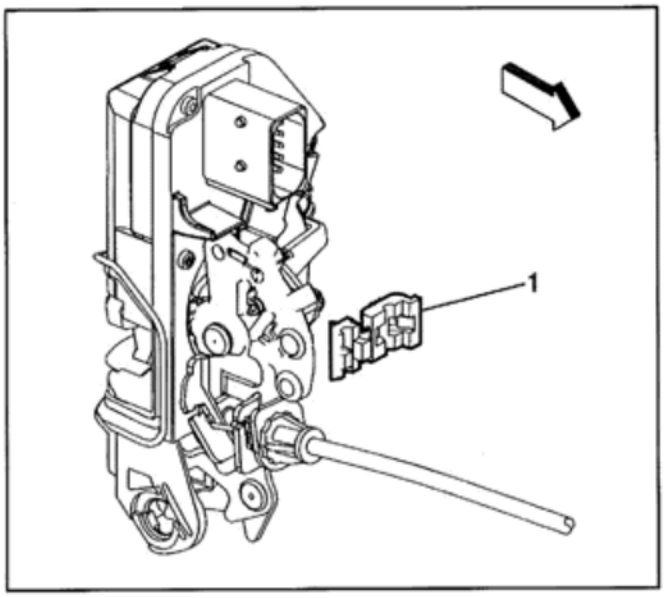
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Front Side Door Outside Handle Replacement

Callout	Component Name
1	Front Side Door Outside Handle **Procedure** 1. Remove the front side door water deflector. 2. Disconnect the electrical connector. 3. Remove the access hole plug located on the inside opening of the door that conceals the screw for the latch cylinder clamp. 4. Pull and hold the door handle in the open position. 5. While holding the door handle, unscrew the latch cylinder clamp screw until it comes to a hard stop. 6. Release the handle, by now the handle should stay in the open position. 7. Remove the lock cylinder, gently pull it straight out. 8. Remove the outside door handle by sliding rearwards and then out in a swinging motion. 9. Inspect the door locking system for proper operation before installing the trim panel. **Tip:** While screwing in the screw for the lock cylinder hold the handle in the open position, this will avoid the door handle from snapping once the spring pressure is relieved and the door handle returns to the close position.

Front and Rear Side Door Outside Handle Rod Clip Replacement

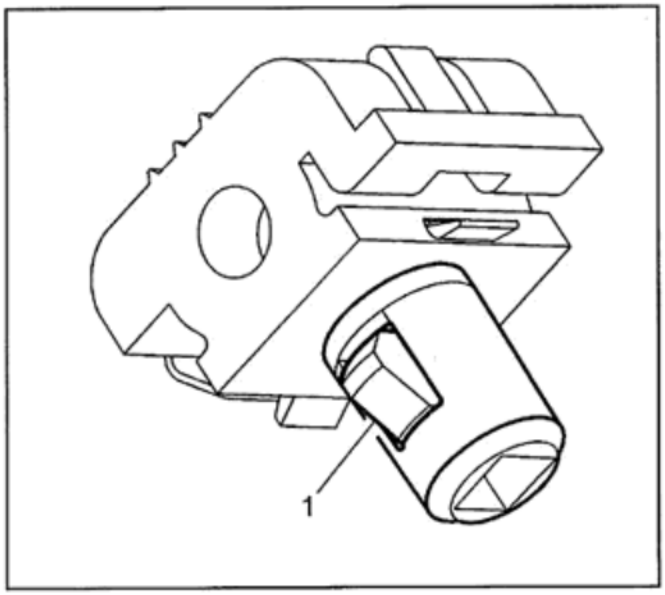
Removal Procedure



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Note: It maybe necessary to remove the front or rear side door latch from some of the vehicles to access the rod clip, refer to the appropriate procedure in this sub-section.

1. Using the appropriate tool, open the outside door handle rod clip (1) on the latch.



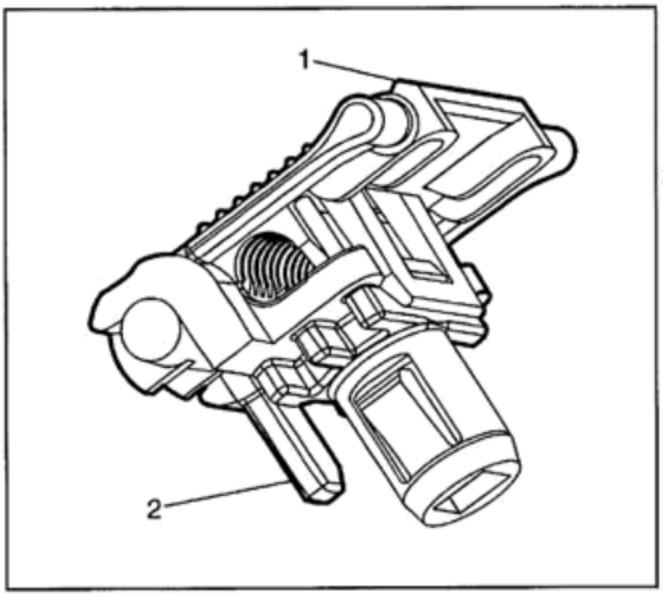
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Note: The clip for the outside door handle rod is designed for one use only, a new clip Must be installed to the door latch to retain the outside handle rod.

Note: Use the appropriate tool to push in on the retaining tabs (1) located on each side of the old clip to remove.

2. Remove the old outside door handle rod clip (1) from the door latch.

Installation Procedure



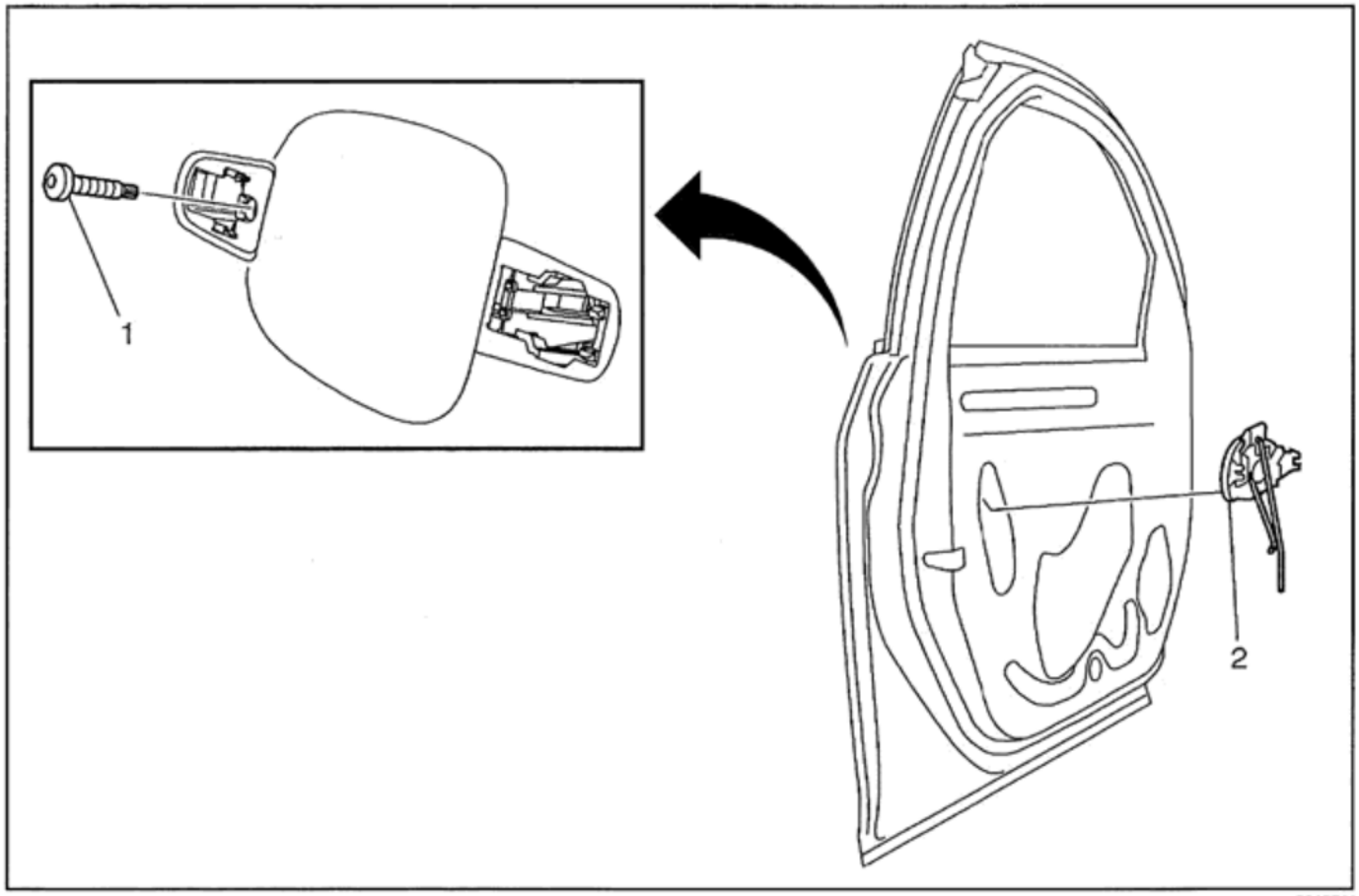
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Note: When replacing the old designed outside door handle rod clip with the new designed clip (1) the anti rotation tab (2) will need to be removed.

Note: When installing the outside door handle rod to latch in order to prevent outside handle lever pre-load, the outside handle shall be fully secured to the door prior to securing integral latch clip to outside handle release rod. Push upward at the bottom the rod clip.

1. Install the new outside door handle rod clip (1) to the latch.
2. Verify the outside door handle will release the door latch.

Front Side Door Outside Handle Bracket Replacement

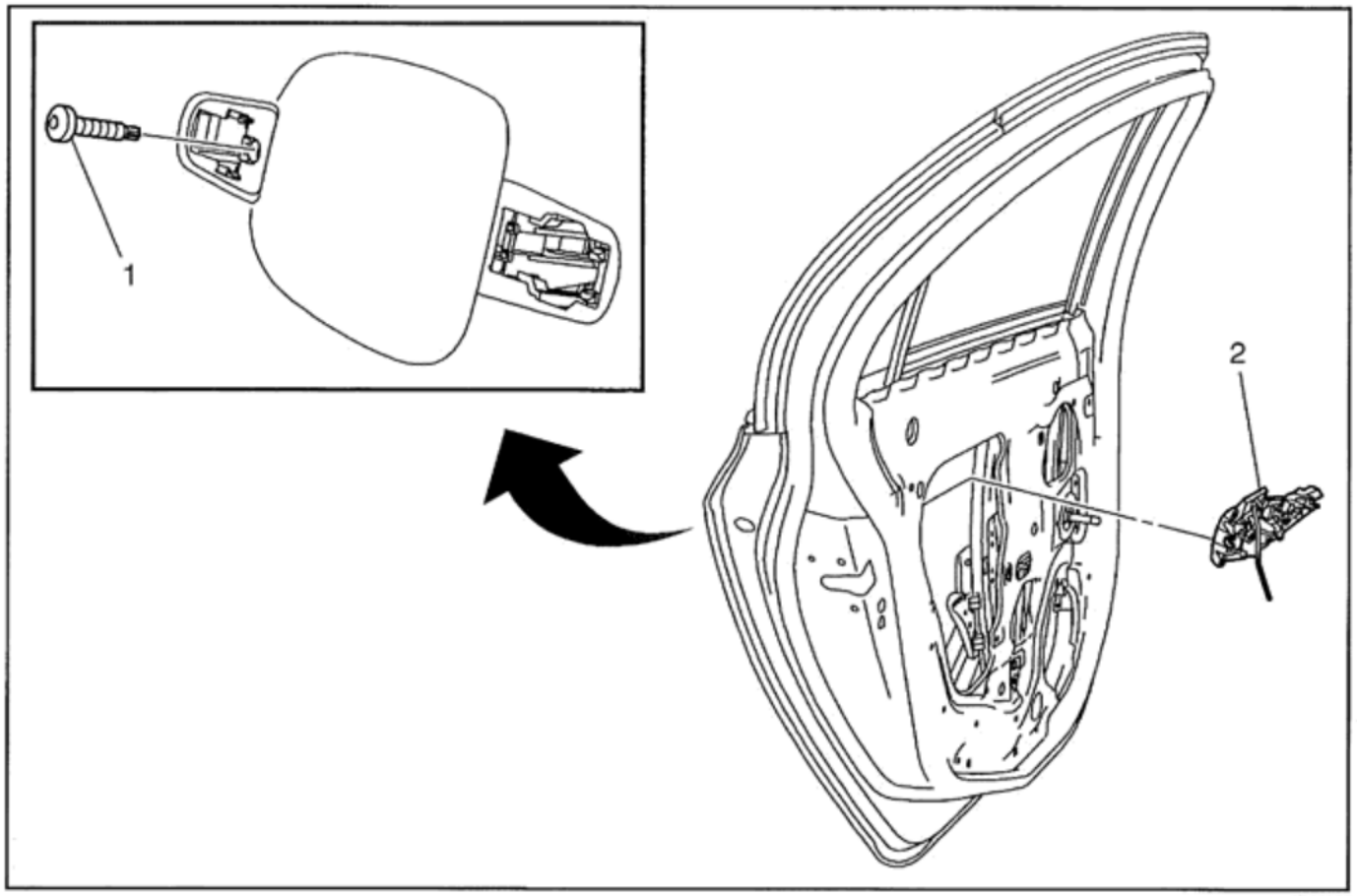


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Front Side Door Outside Handle Bracket Replacement

Callout	Component Name
Preliminary Procedures 1. Remove the front side door trim panel. Refer to *Front Side Door Trim Replacement on page 2-67*. 2. Remove the front side door outside handle. Refer to *Front Side Door Outside Handle Replacement on page 4-291*.	
1	Front Side Door Outside Handle Bracket Screw **Caution:** Refer to *Fastener Caution on page 0-8*. **Procedure** Remove the front side door water deflector. **Tighten** 5 N•m (44 lb in)
2	Front Side Door Outside Handle Bracket **Procedure** 1. Release front side door outside handle rod mechanism at shift linkage lever – clip. 2. Release the front side door latch cylinder rod from the door latch. 3. Transfer components as necessary. 4. Inspect the door latch system for proper operation before installing the door trim panel.

Rear Side Door Outside Handle Bracket Replacement

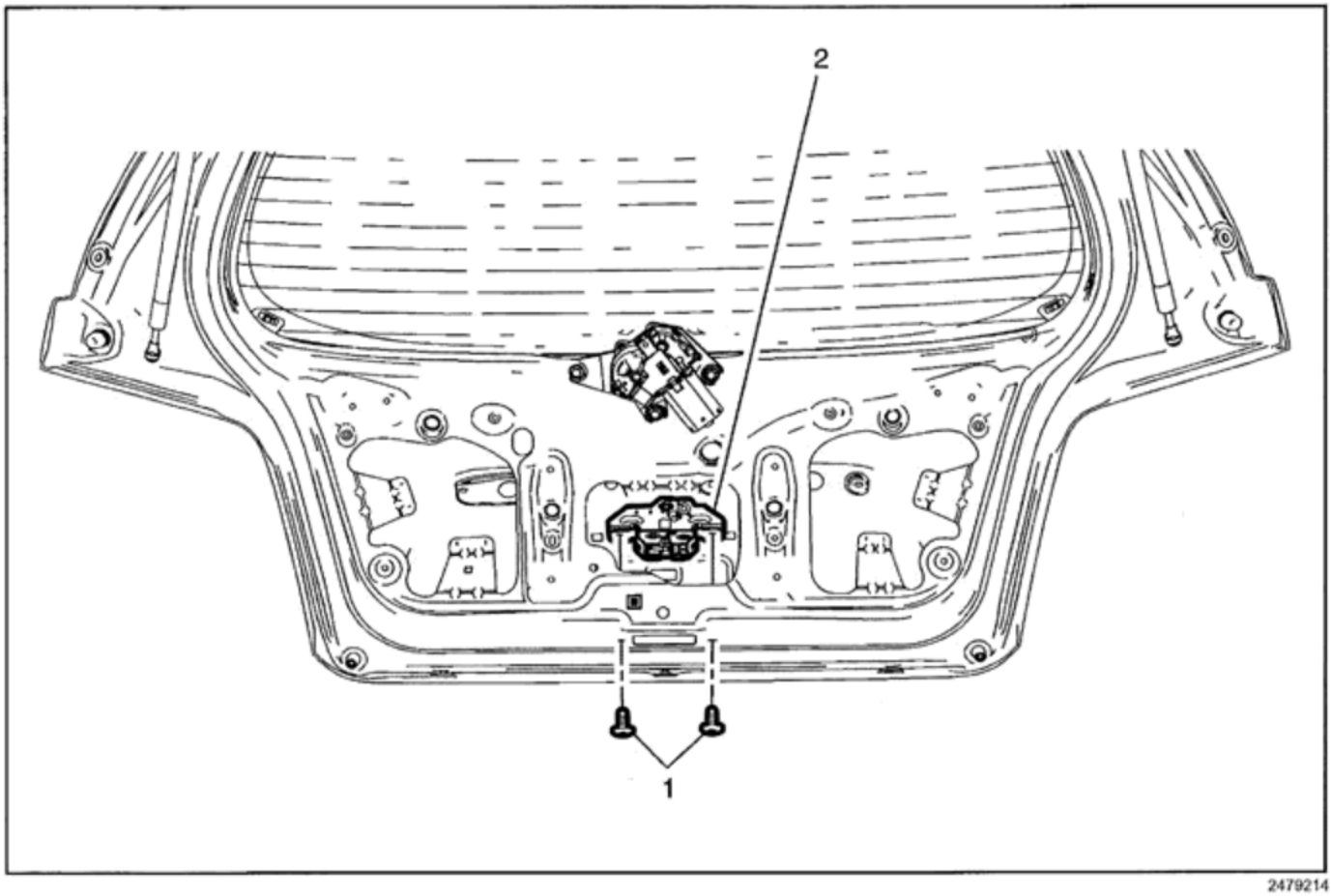


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Rear Side Door Outside Handle Bracket Replacement

Callout	Component Name
Preliminary Procedures 1. Remove the rear side door trim panel. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*. 2. Remove the rear side door outside handle. Refer to *Rear Side Door Outside Handle Replacement (Hatchback) on page 4-298* or *Rear Side Door Outside Handle Replacement (Sedan) on page 4-297*.	
1	Rear Side Door Outside Handle Bracket Screw **Caution:** Refer to *Fastener Caution on page 0-8*. **Procedure** Remove the rear side door water deflector. **Tighten** 5 N•m (44 lb in)
2	Rear Side Door Outside Handle Bracket **Procedure** 1. Release rear side door outside handle rod mechanism at shift linkage lever – clip. 2. Release the rear side door latch cylinder rod from the door latch. 3. Transfer components as necessary. 4. Inspect the door latch system for proper operation before installing the door trim panel.

Liftgate Latch Replacement

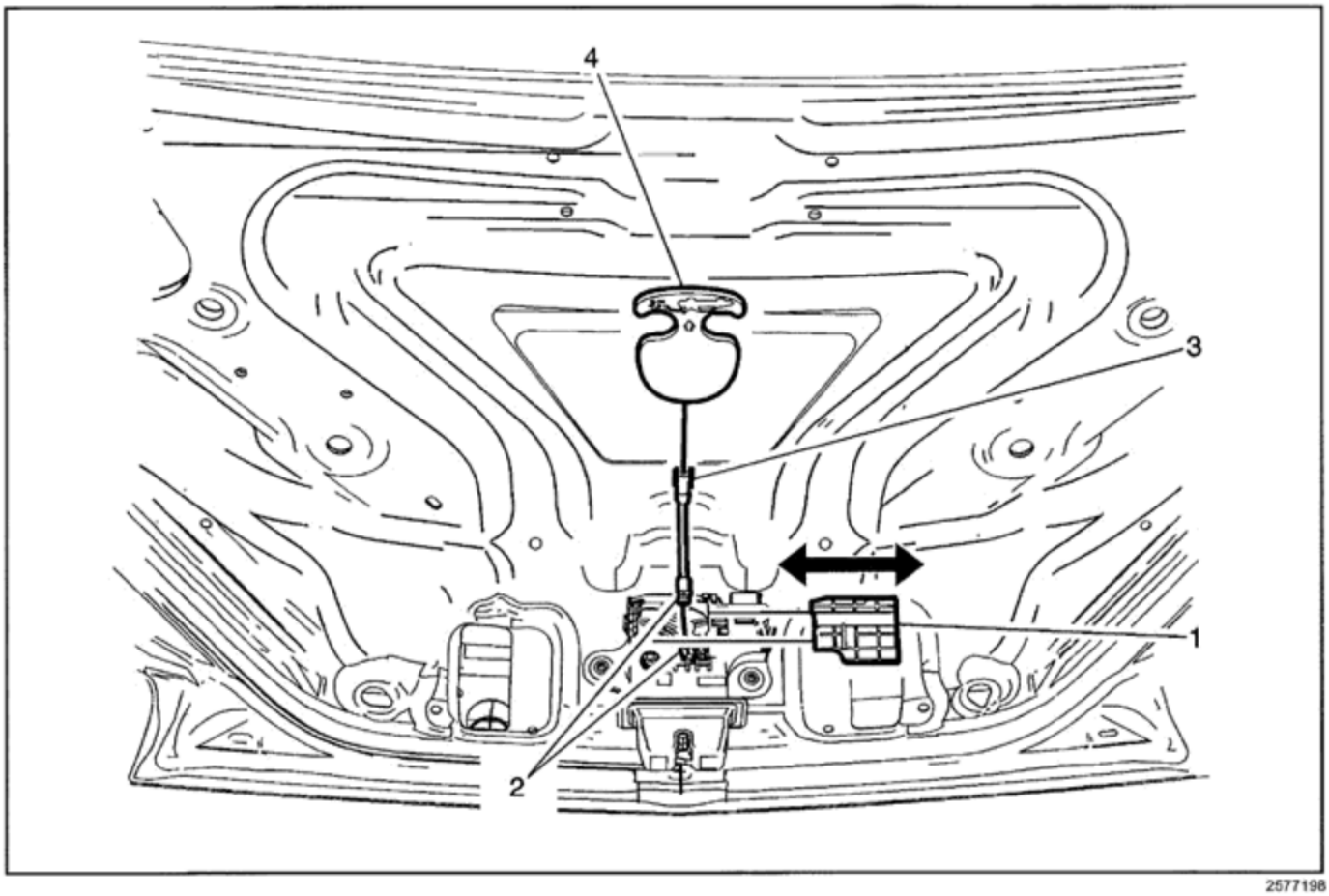


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Liftgate Latch Replacement

Callout	Component Name
Preliminary Procedures 1. Remove the liftgate trim finish panel. Refer to *Liftgate Trim Finish Panel Replacement (Hatchback) on page 2-86*. 2. Remove the liftgate latch cover.	
1	Liftgate Latch Screw (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8*. **Tighten** 9 N•m (80 lb in)
2	Liftgate Latch Assembly **Procedure** 1. Disconnect the electrical connector. 2. Adjust the liftgate if needed.

Rear Compartment Lid Inside Handle Replacement

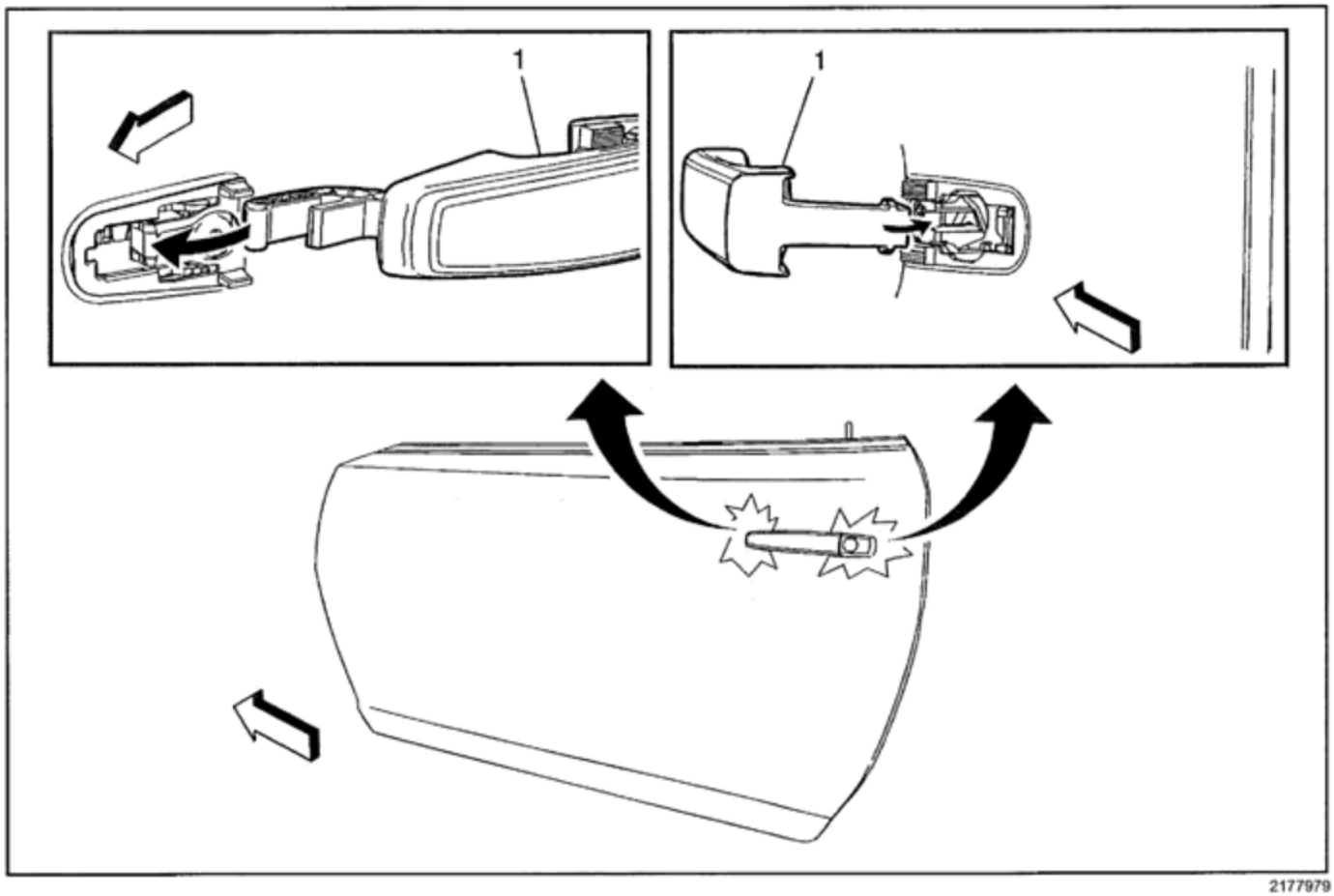


2577198

Rear Compartment Lid Inside Handle Replacement

Callout	Component Name
Preliminary Procedure Remove the rear compartment lid inner panel trim. Refer to *Rear Compartment Lid Inner Panel Trim Replacement (Sedan) on page 2-88*.	
1	Rear Compartment Lid Inside Latch Handle Access Cover **Procedure** Depress the retainers and slide the access cover to access the cable.
2	Rear Compartment Lid Inside Latch Handle Cable **Procedure** Disconnect the rear compartment lid inside latch handle cable from the latch.
3	Rear Compartment Lid Inside Latch Handle Cable Retainer **Procedure** Unclip the rear compartment lid inside latch handle cable clip from the rear compartment lid.
4	Rear Compartment Lid Inside Latch Handle

Rear Side Door Outside Handle Replacement (Sedan)

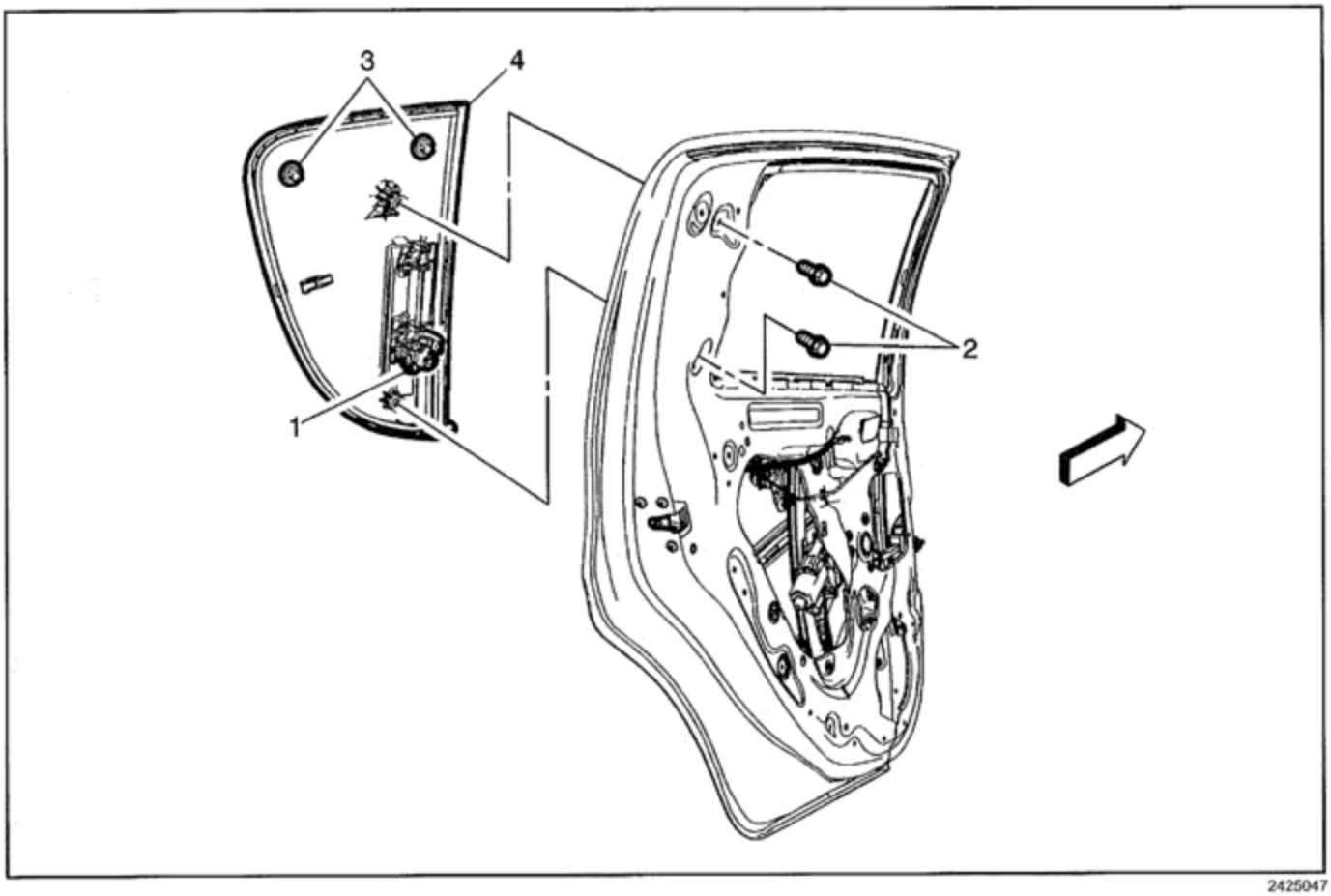


2177979

Rear Side Door Outside Handle Replacement (Sedan)

Callout	Component Name
Preliminary Procedures Remove the rear side door lock cylinder opening cover. Refer to *Rear Side Door Lock Cylinder Opening Cover Replacement on page 4-303*.	
1	Rear Side Door Outside Handle **Procedures** 1. Remove the rear side door water deflector. 2. Remove the access hole plug located on the inside opening of the door that conceals the screw for the lock cylinder clamp. 3. Pull and hold the door handle in the open position. 4. While holding the door handle, unscrew the lock cylinder clamp screw until it comes to a hard stop. 5. Release the handle, by now the handle should stay in the open position. 6. Remove the lock cylinder, gently pull it straight out. 7. Remove the outside door handle by sliding rearwards and then out in a swinging motion. 8. Inspect the door locking system for proper operation before installing the trim panel. **Tip:** While screwing in the screw for the lock cylinder hold the handle in the open position, this will avoid the door handle from snapping once the spring pressure is relieved and the door handle returns to the close position.

Rear Side Door Outside Handle Replacement (Hatchback)

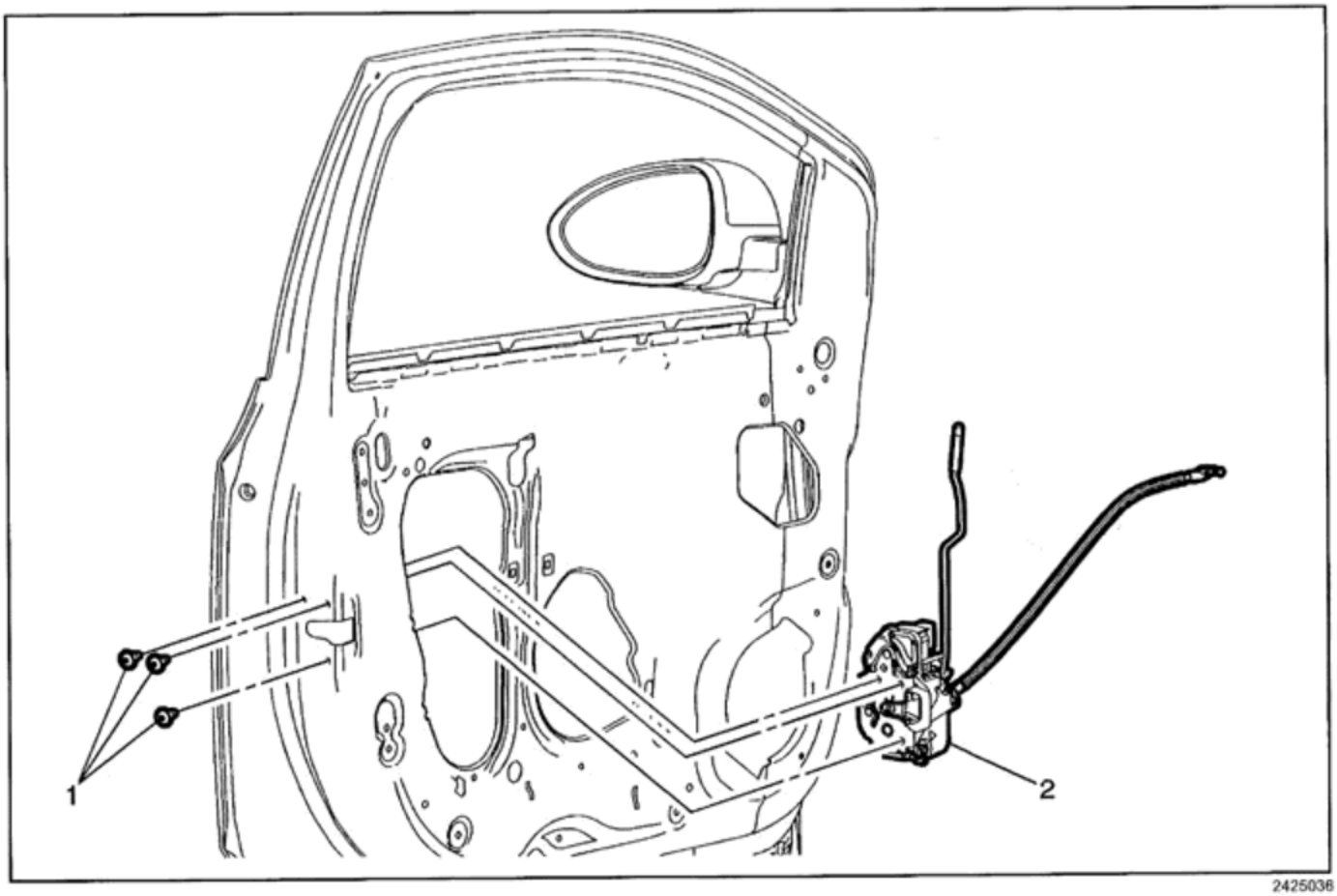


2425047

Rear Side Door Outside Handle Replacement (Hatchback)

Callout	Component Name
Preliminary Procedures Remove the rear side door trim. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*.	
1	Rear Side Door Outside Handle Rod Clip **Procedure** 1. Place the window in the full up position. 2. Remove the water deflector. 3. Remove the outside door handle rod from the clip, Do not remove the rod from the door lock.
2	Rear Side Door Outside Handle Screws (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8*. **Tighten** 9 N•m (80 lb in)
3	Rear Side Door Outside Handle Push-In Retainers (Qty: 2) **Tip:** If the retainers are broken when removing they Must be replaced.
4	Rear Side Door Outside Handle **Procedure** In order to prevent outside handle lever pre-load, lock, outside handle shall be fully secured to the door prior to securing integral lock clip to outside handle rod. Integral lock clip shall be in the full up position while securing to outside handle rod. Refer to *Rear Side Door Outside Handle Rod Adjustment on page 4-311*. **Note:** Inspect the door lock system for proper operation before installing the door trim.

Front Side Door Latch Replacement

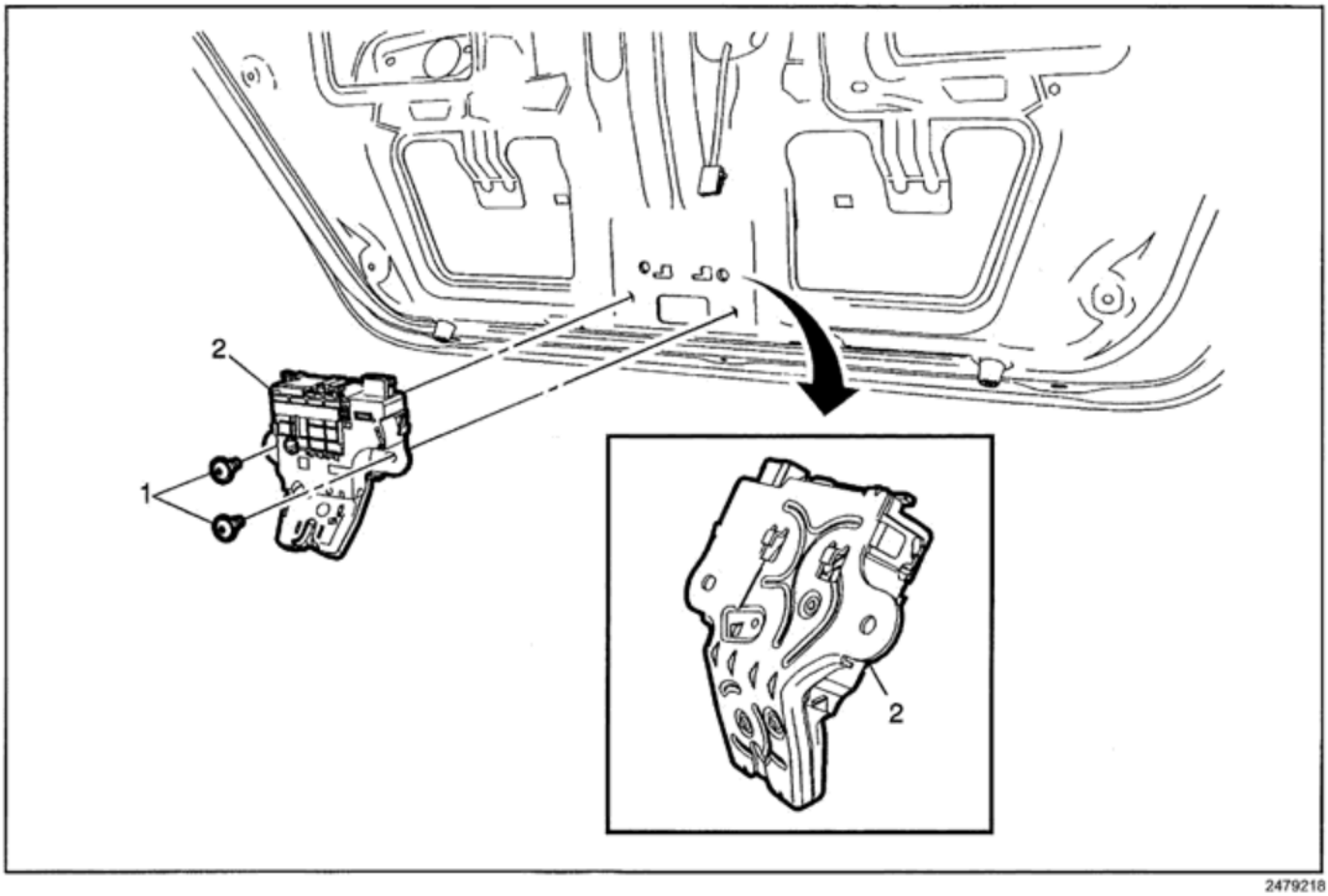


2425036

Front Side Door Latch Replacement

Callout	Component Name
Preliminary Procedure Remove the front side door trim panel. Refer to *Front Side Door Trim Replacement on page 2-67*.	
1	Front Side Door Lock Screw (Qty: 3) **Caution:** Refer to *Fastener Caution on page 0-8*. **Procedures** 1. Remove the water deflector. 2. Release the front inside door handle cable retainers from the door. 3. Remove the front side door window rear guide. Refer to *Front Side Door Window Rear Guide Replacement on page 4-49*. **Tighten** 10 N•m (89 lb in)
2	Front Side Door Lock Assembly **Procedure** 1. Disconnect the front side door lock electrical connector. 2. Transfer the front side door lock rods. 3. Front outside door handle rod adjustment. Refer to *Front Side Door Outside Handle Rod Adjustment on page 4-306*.

Rear Compartment Lid Latch Replacement

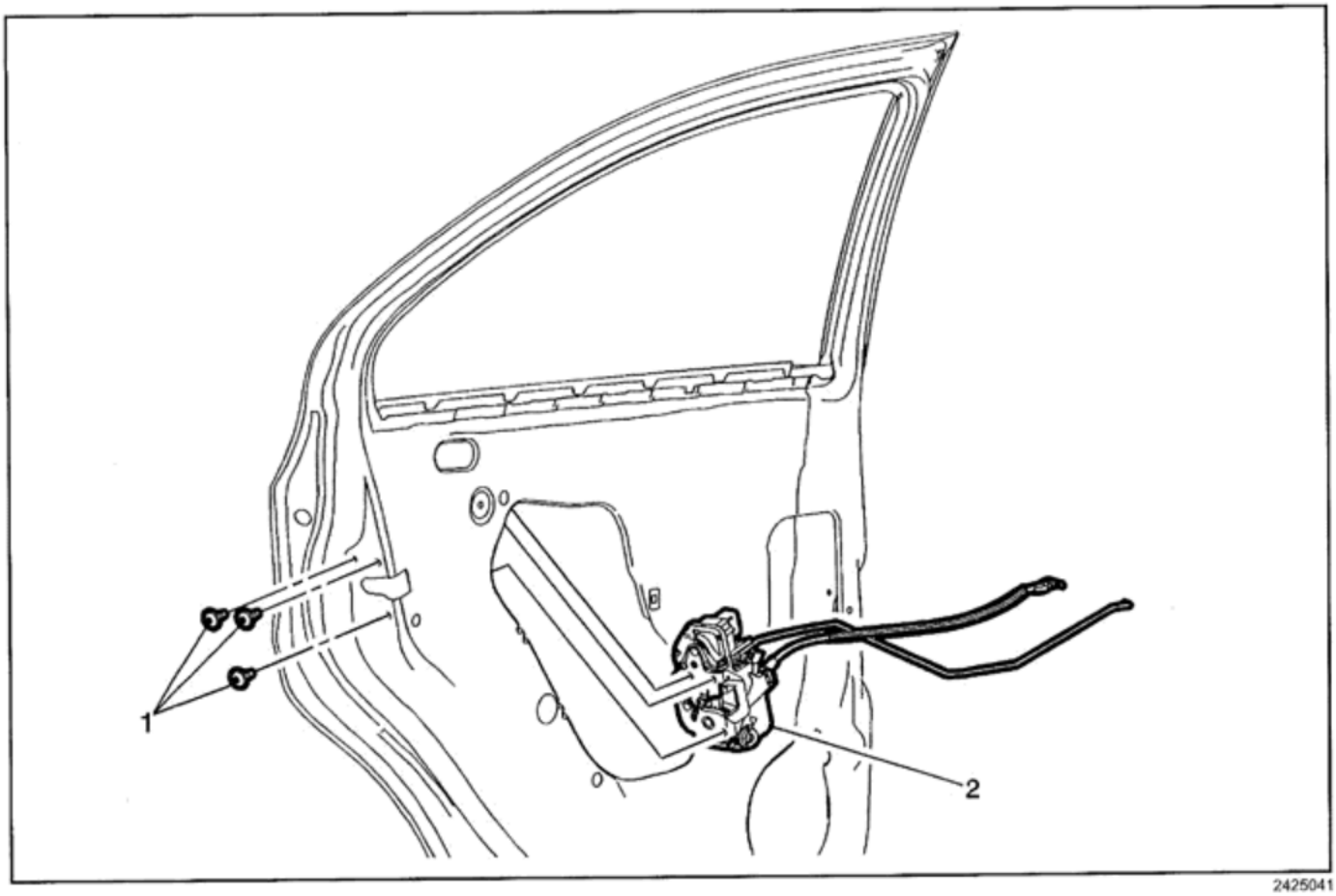


2479218

Rear Compartment Lid Latch Replacement

Callout	Component Name
Preliminary Procedure Remove the rear compartment lid inner panel trim. Refer to *Rear Compartment Lid Inner Panel Trim Replacement (Sedan) on page 2-88*.	
1	Rear Compartment Lid Latch Screw (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8*. **Tighten** 9 N•m (80 lb in)
2	Rear Compartment Latch **Procedure** 1. Disconnect the electrical connection. 2. Slide the latch to the right and up to remove from the compartment lid.

Rear Side Door Latch Replacement

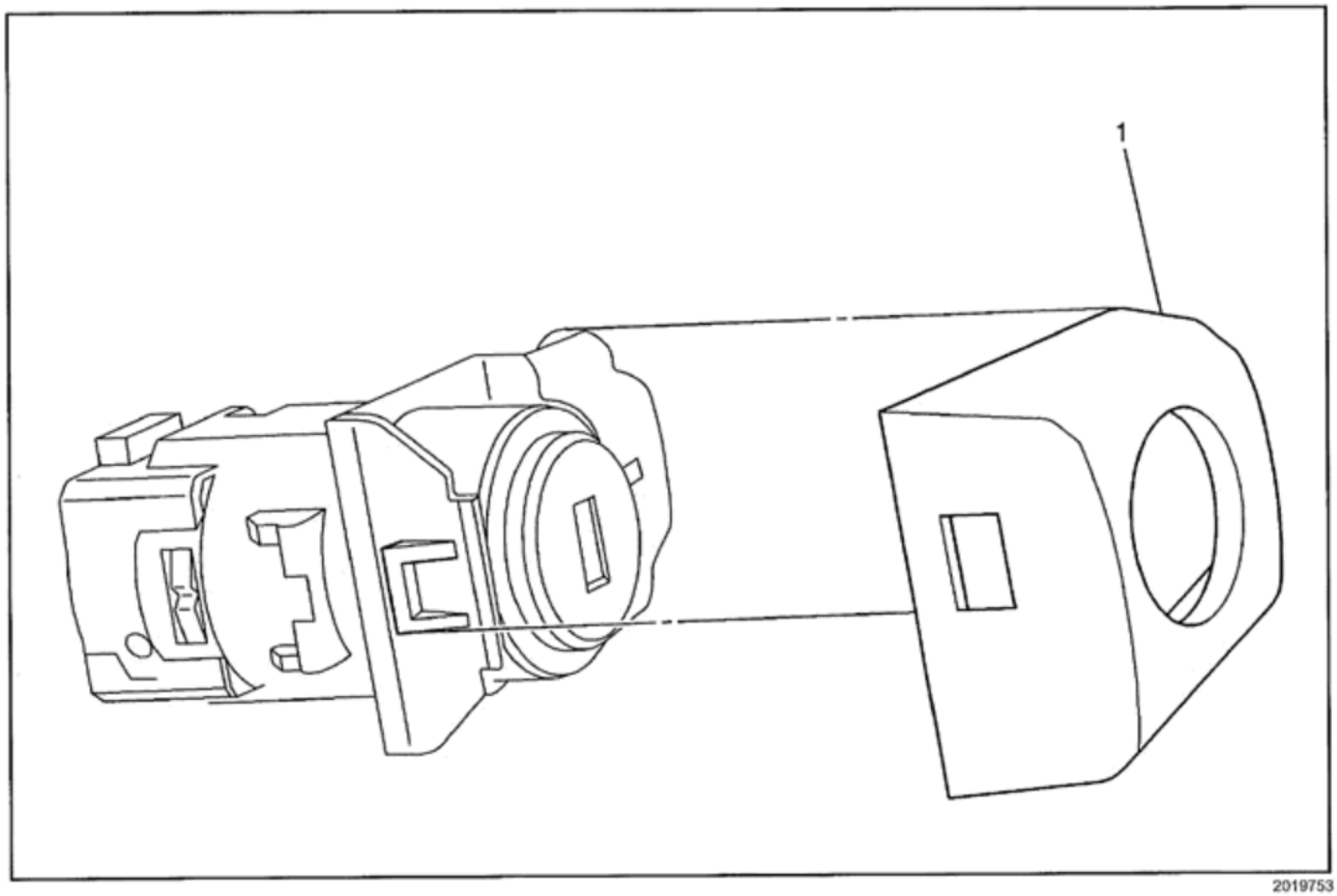


2425041

Rear Side Door Latch Replacement

Callout	Component Name
Preliminary Procedure Remove the rear side door trim panel. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*.	
1	Rear Side Door Lock Screw (Qty: 3) **Caution:** Refer to *Fastener Caution on page 0-8*. **Procedures** 1. Remove the water deflector. 2. Release the rear inside door handle cable retainers from the door. 3. Remove the rear side door window rear guide. Refer to *Rear Side Door Window Rear Guide Replacement on page 4-50*. **Tighten** 10 N•m (89 lb in)
2	Rear Side Door Lock Assembly **Procedure** 1. Disconnect the rear side door lock electrical connector. 2. Transfer the rear side door lock rods. 3. Rear outside door handle rod adjustment. Refer to *Rear Side Door Outside Handle Rod Adjustment on page 4-311*.

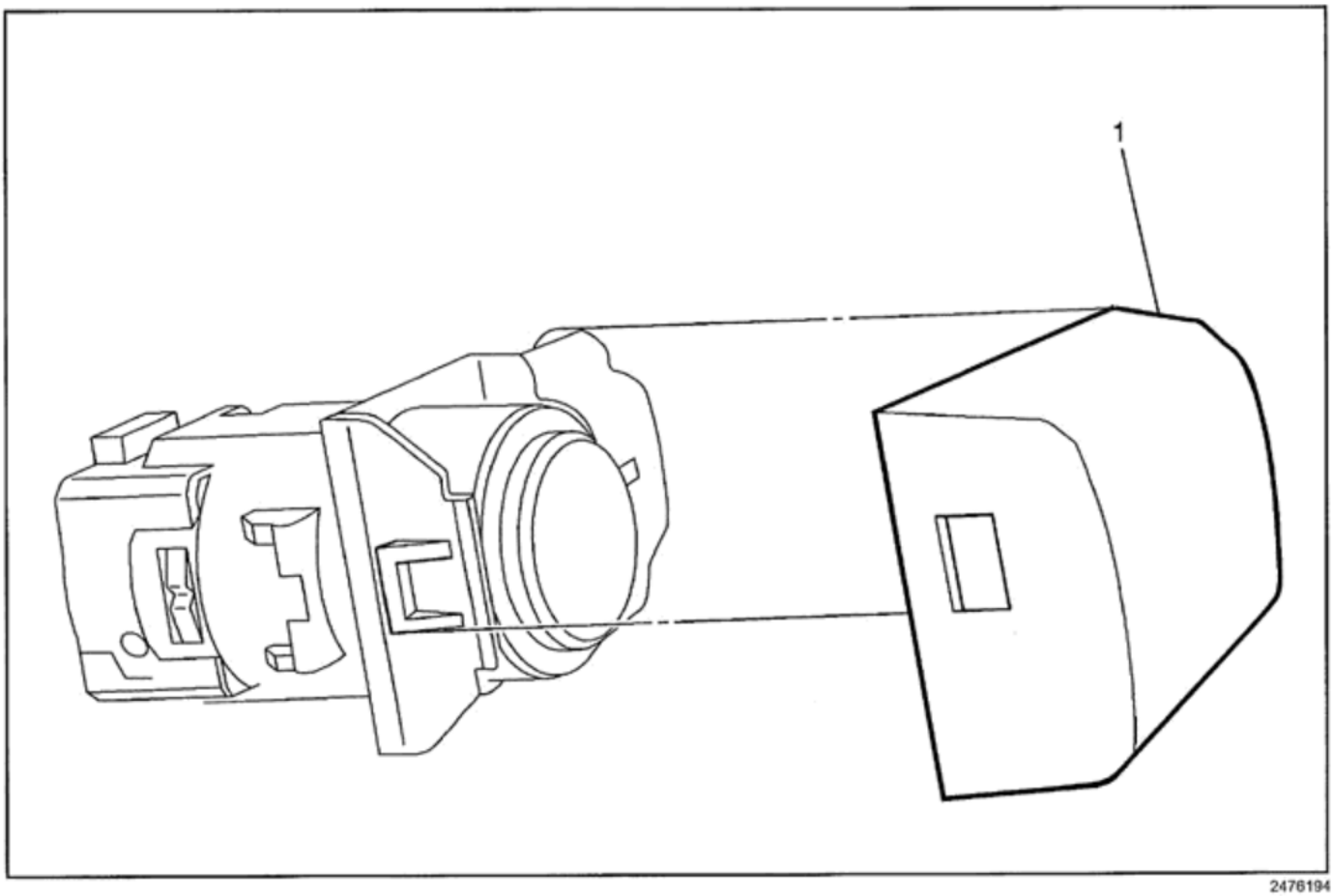
Front Side Door Lock Cylinder Opening Cover Replacement



Front Side Door Lock Cylinder Opening Cover Replacement

Callout	Component Name
1	Front Side Door Lock Cylinder Opening Cover **Procedure** 1. Remove the front side door lock cylinder, Do Not remove the outside door handle. Refer to *Front Side Door Lock Cylinder Replacement on page 4-289*. 2. Do Not remove the lock cylinder screw completely from the housing. Unscrew the screw to a hard stop, remove the cylinder. **Tip:** Use a small flat-bladed tool to release the lock cylinder bezel retainers location on both sides.

Rear Side Door Lock Cylinder Opening Cover Replacement

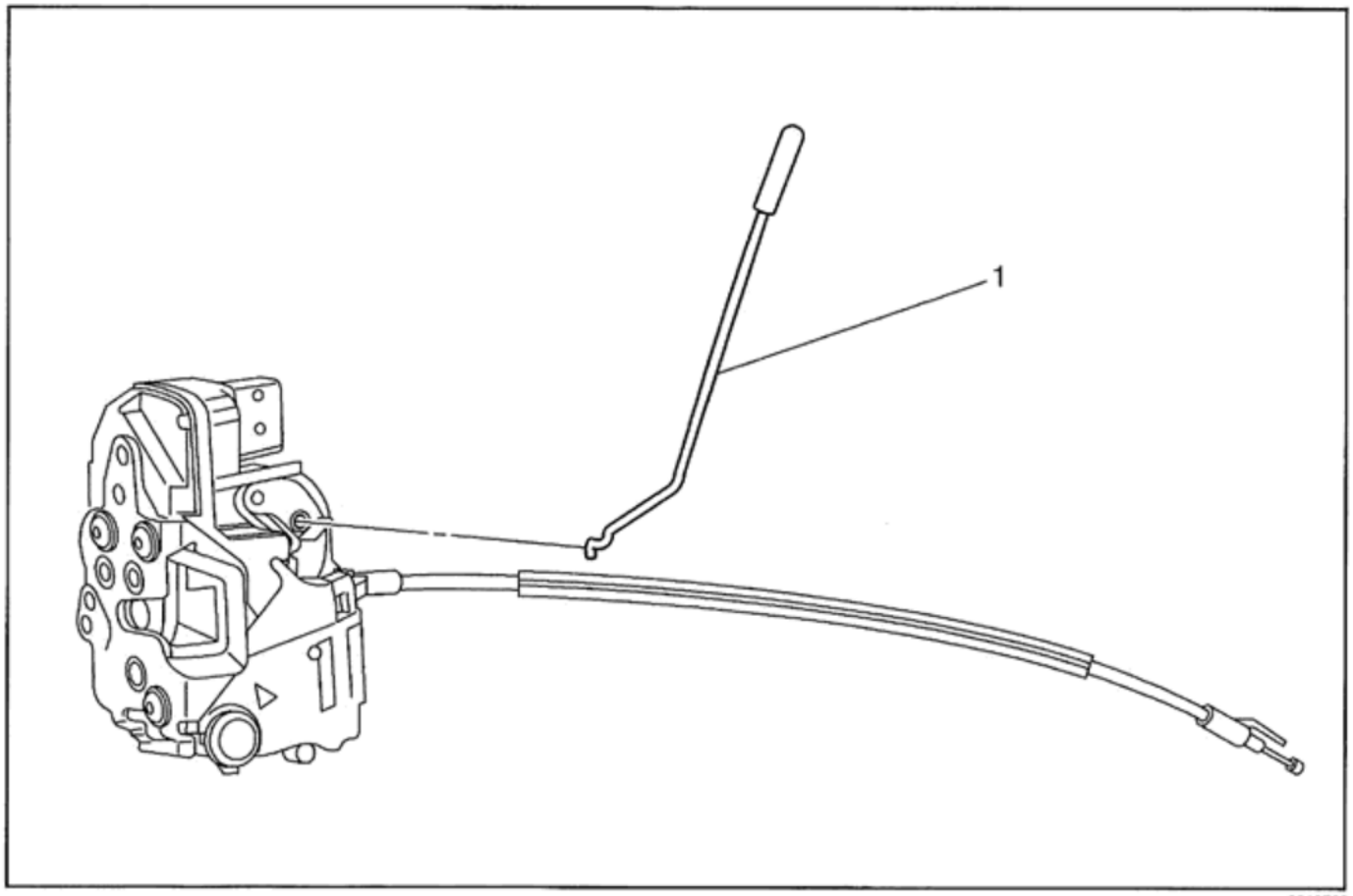


2476194

Rear Side Door Lock Cylinder Opening Cover Replacement

Callout	Component Name
1	Rear Side Door Lock Cylinder Opening Cover **Procedure** 1. Remove the rear side door lock cylinder, Do Not remove the outside door handle. Refer to *Rear Door Lock Cylinder Replacement on page 4-290*. 2. Do Not remove the lock cylinder screw completely from the housing. Unscrew the screw to a hard stop, remove the cylinder. **Tip:** Use a small flat-bladed tool to release the lock cylinder bezel retainers location on both sides.

Front Side Door Locking Rod Replacement

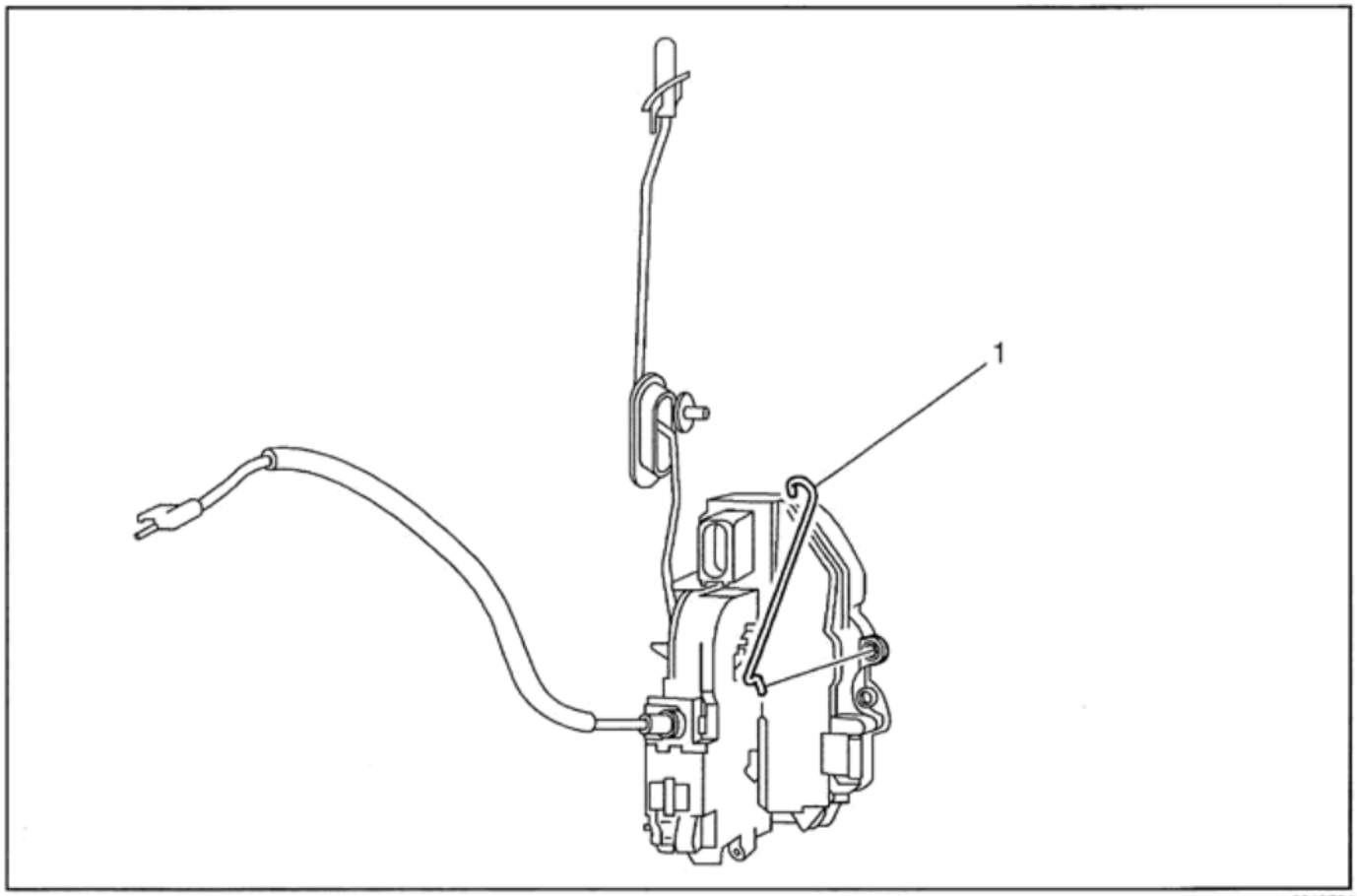


2019703

Front Side Door Locking Rod Replacement

Callout	Component Name
Preliminary Procedure 1. Remove the front side door window rear guide. Refer to *Front Side Door Window Rear Guide Replacement on page 4-49*. 2. Remove the front side door lock . Refer to *Front Side Door Latch Replacement on page 4-299*. Do Not remove the lock completely from the door, lower the lock to disconnect the rod.	
1	Front Side Door Lock Rod **Procedure** 1. Place the window in the full up position. 2. Remove the water deflector. 3. Transfer components as necessary. 4. In order to prevent outside handle lever pre-load, lock, outside handle, handle bracket and cover/cap shall be fully secured to the door prior to securing integral lock clip to outside handle rod. Integral lock clip shall be in the full up position while securing to outside handle rod. Refer to *Front Side Door Outside Handle Rod Adjustment on page 4-306*. **Tip:** Inspect the door lock system for proper operation before installing the door trim panel.

Front Side Door Lock Cylinder Rod Replacement

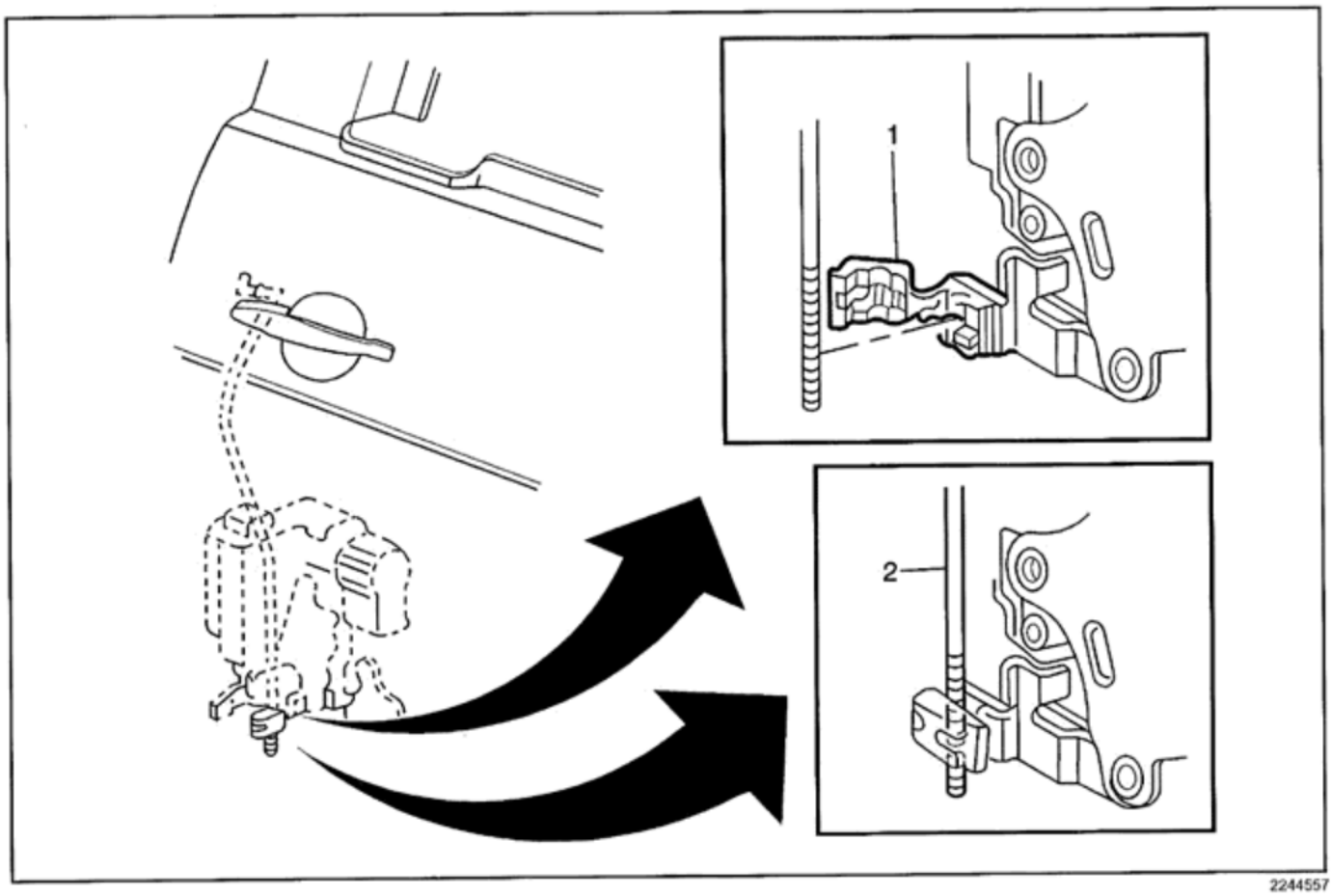


2019751

Front Side Door Lock Cylinder Rod Replacement

Callout	Component Name
Preliminary Procedure 1. Remove the rear side door window rear guide. Refer to *Rear Side Door Window Rear Guide Replacement on page 4-50*. 2. Remove the rear side door lock. Refer to *Rear Side Door Latch Replacement on page 4-301*.	
1	Rear Side Door Lock Cylinder Rod **Procedure** 1. Place the window in the full up position. 2. Remove the water deflector. 3. In order to prevent outside handle lever pre-load, lock, outside handle, handle bracket and cover/cap shall be fully secured to the door prior to securing integral lock clip to outside handle rod. Integral lock clip shall be in the full up position while securing to outside handle rod. Refer to *Front Side Door Outside Handle Rod Adjustment on page 4-306*. **Tip:** Inspect the door lock system for proper operation before installing the door trim panel.

Front Side Door Outside Handle Rod Adjustment

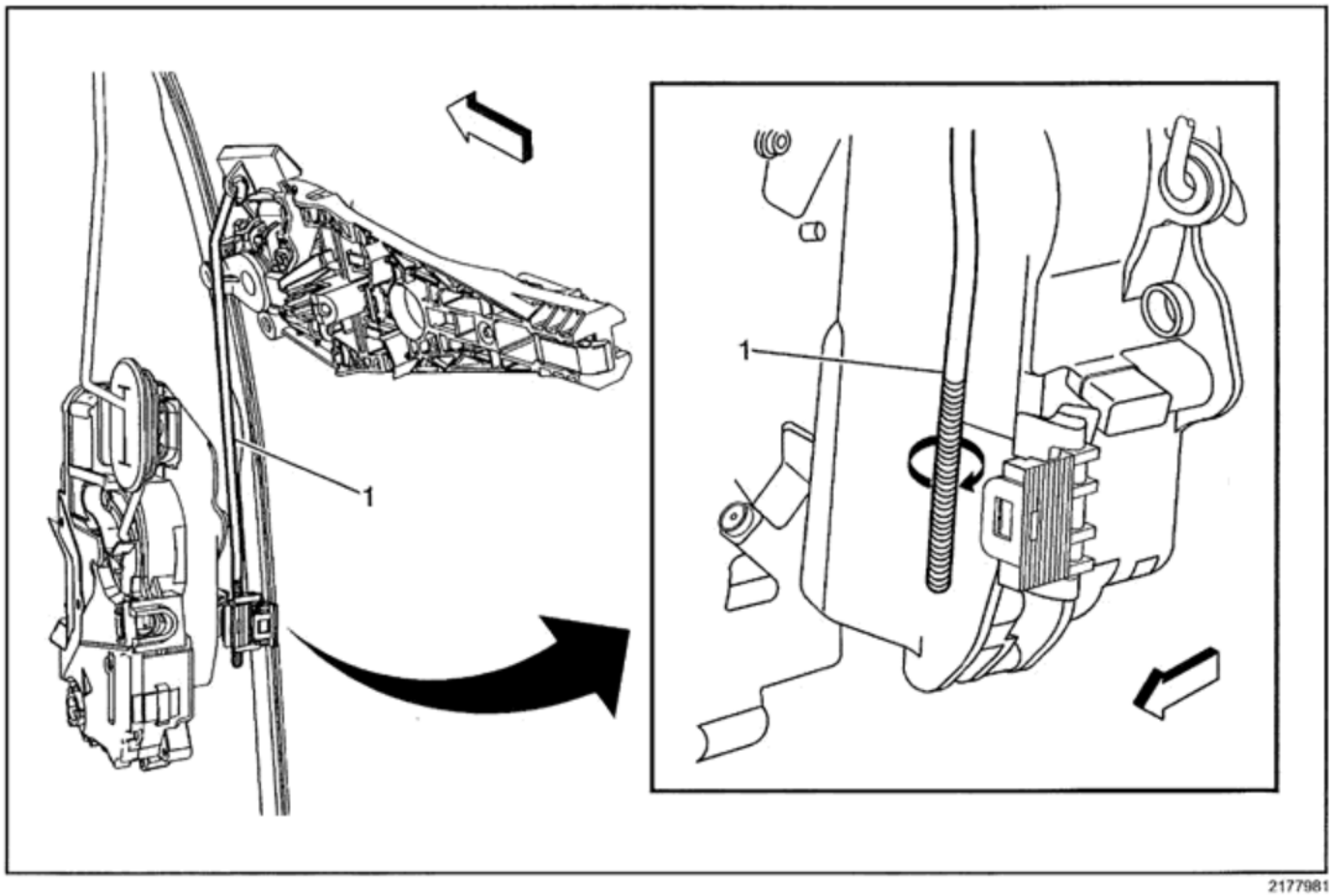


2244557

Front Side Door Outside Handle Rod Adjustment

Callout	Component Name
Preliminary Procedures Remove the front side door trim panel. Refer to *Front Side Door Trim Replacement on page 2-67*	
1	Front Side Door Outside Handle Rod Retainer **Procedure** Remove the front side door water deflector.
2	Front Side Door Outside Handle Rod **Procedure** 1. Position the front side door outside handle rod in the retainer in order to eliminate any free play in the outside door handle. 2. Adjust the travel of the handle by removing the threaded rod from the retainer. 3. Install the retainer cover closed over the threaded front side door outside handle rod. 4. Inspect the door lock system for proper operation before installing the trim panel. **Tip:** Use a flat-head tool to open the retainer from the threaded rod connecting the lock to the outside handle.

Front Side Door Outside Handle Rod Replacement

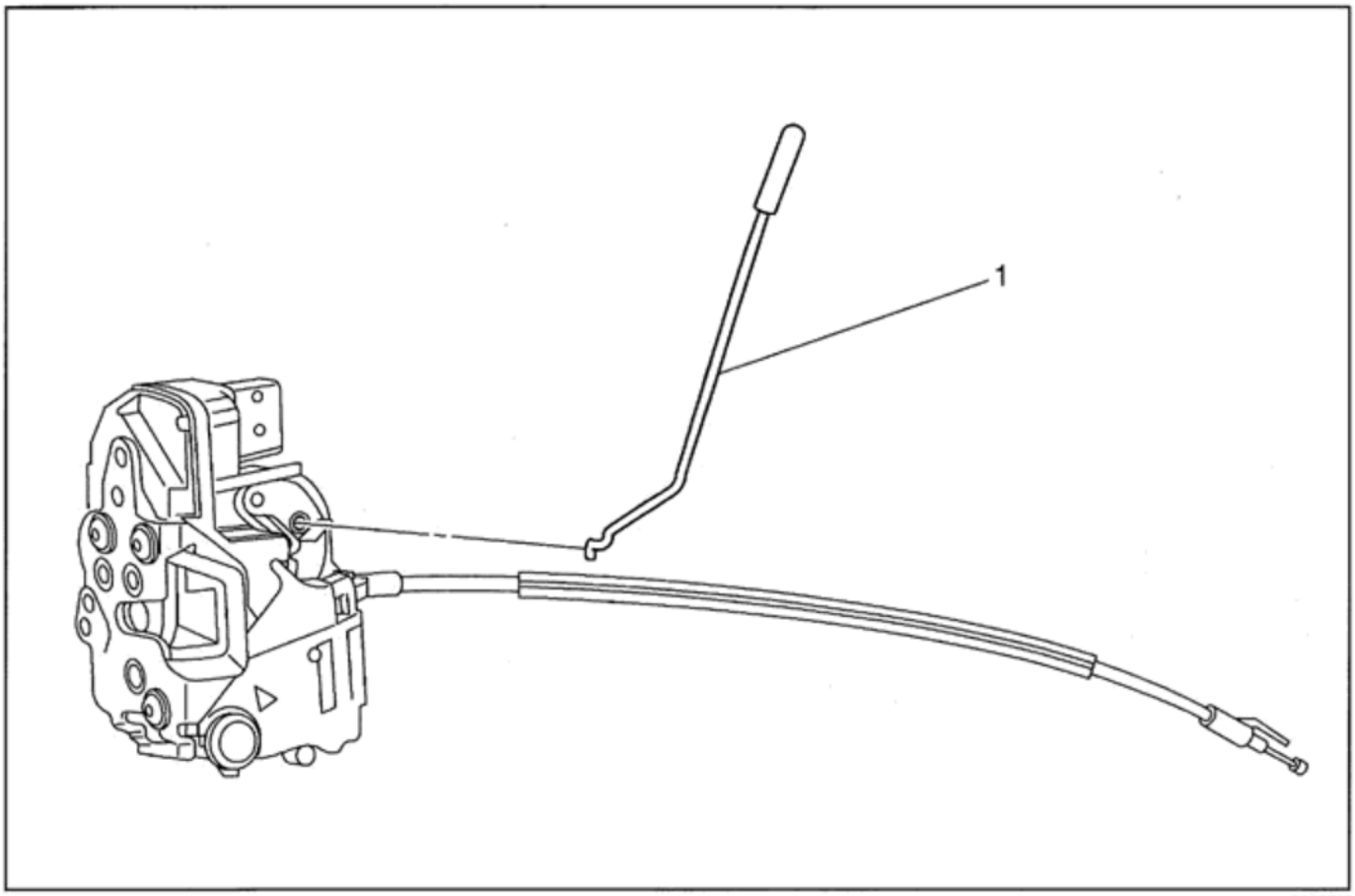


2177981

Front Side Door Outside Handle Rod Replacement

Callout	Component Name
Preliminary Procedure Remove the front side door outside handle bracket. Refer to *Front Side Door Outside Handle Bracket Replacement on page 4-293*.	
1	Front Side Door Outside Handle Rod **Procedure** 1. Place the window in the full up position. 2. Remove the water deflector. 3. Open the handle rod by releasing the clip at the end of the handle rod. 4. In order to prevent outside handle lever pre-load, lock, outside handle, handle bracket and cover/cap shall be fully secured to the door prior to securing integral lock clip to outside handle rod. Integral lock clip shall be in the full up position while securing to outside handle rod. Refer to *Front Side Door Outside Handle Rod Adjustment on page 4-306*. **Tip:** Inspect the door lock system for proper operation before installing the door trim panel.

Rear Side Door Locking Rod Replacement (Sedan)

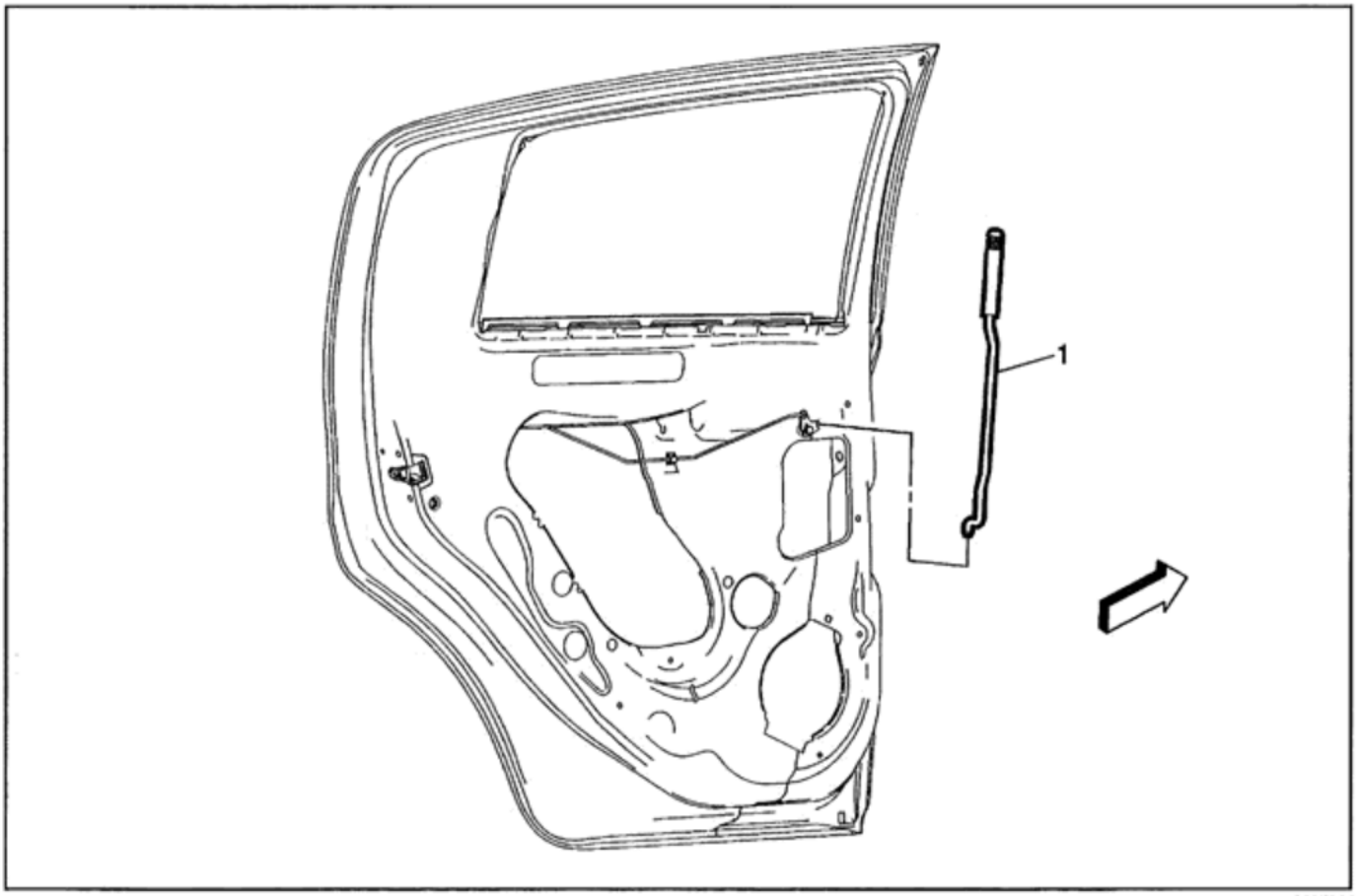


2019703

Rear Side Door Locking Rod Replacement (Sedan)

Callout	Component Name
Preliminary Procedure Remove the rear side door lock. Refer to *Rear Side Door Latch Replacement on page 4-301*. Do Not remove the lock completely from the door, lower the lock to disconnect the rod.	
1	Rear Side Door Lock Rod **Procedure** 1. Place the window in the full up position. 2. Remove the water deflector. 3. Transfer components as necessary. 4. In order to prevent outside handle lever pre-load, lock, outside handle, handle bracket and cover/cap shall be fully secured to the door prior to securing integral lock clip to outside handle rod. Integral lock clip shall be in the full up position while securing to outside handle rod. Refer to *Rear Side Door Outside Handle Rod Adjustment on page 4-311*. **Tip:** Inspect the door lock system for proper operation before installing the door trim panel.

Rear Side Door Locking Rod Replacement (Hatchback)

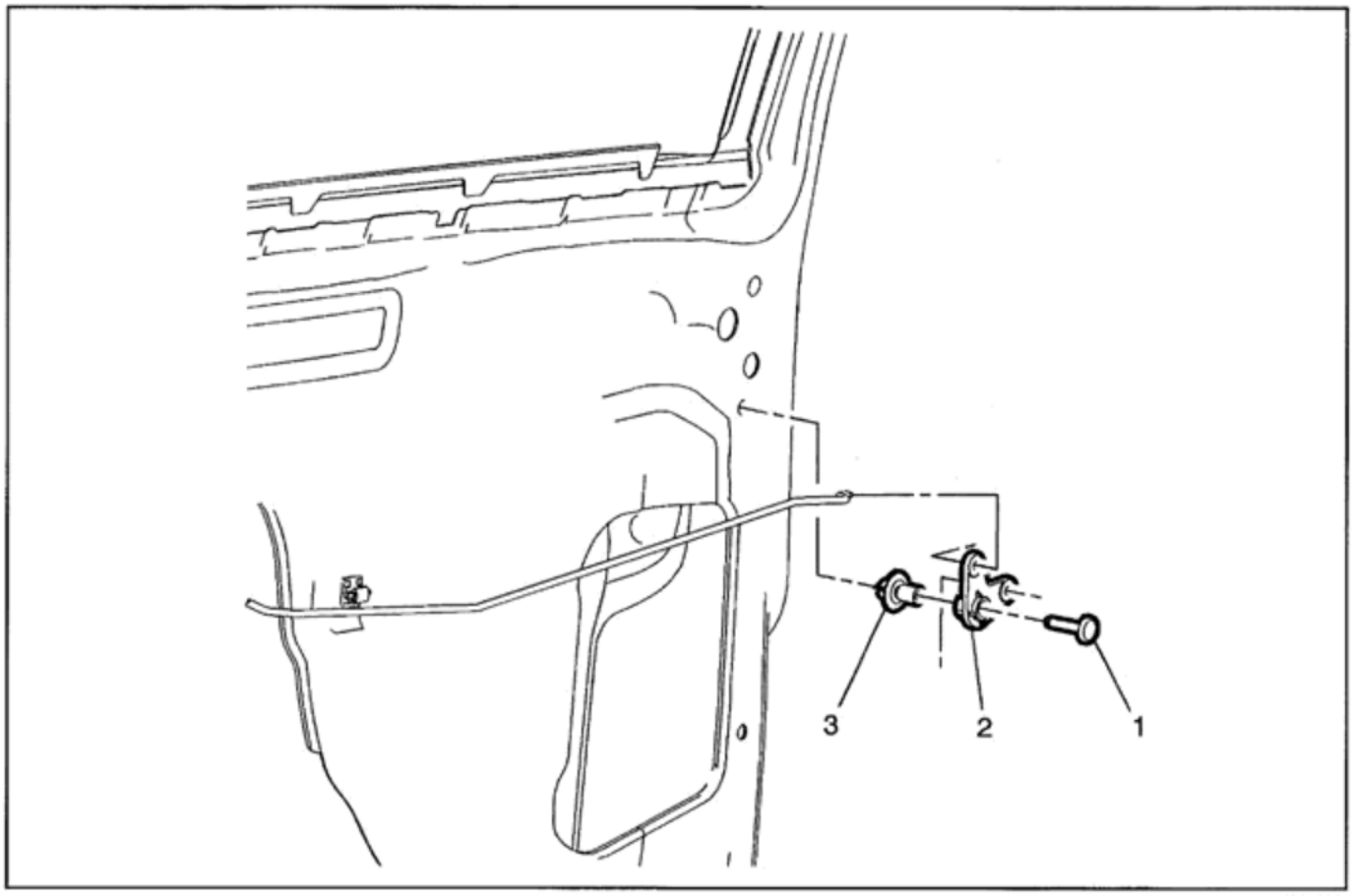


2425044

Rear Side Door Locking Rod Replacement (Hatchback)

Callout	Component Name
Remove the rear side door trim. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*	
1	Rear Side Door Lock Rod **Procedure** 1. Remove the water deflector. 2. Transfer the lock rod button. **Note:** Inspect the door lock system for proper operation before installing the door trim panel.

Rear Side Door Locking Rod Bellcrank Replacement

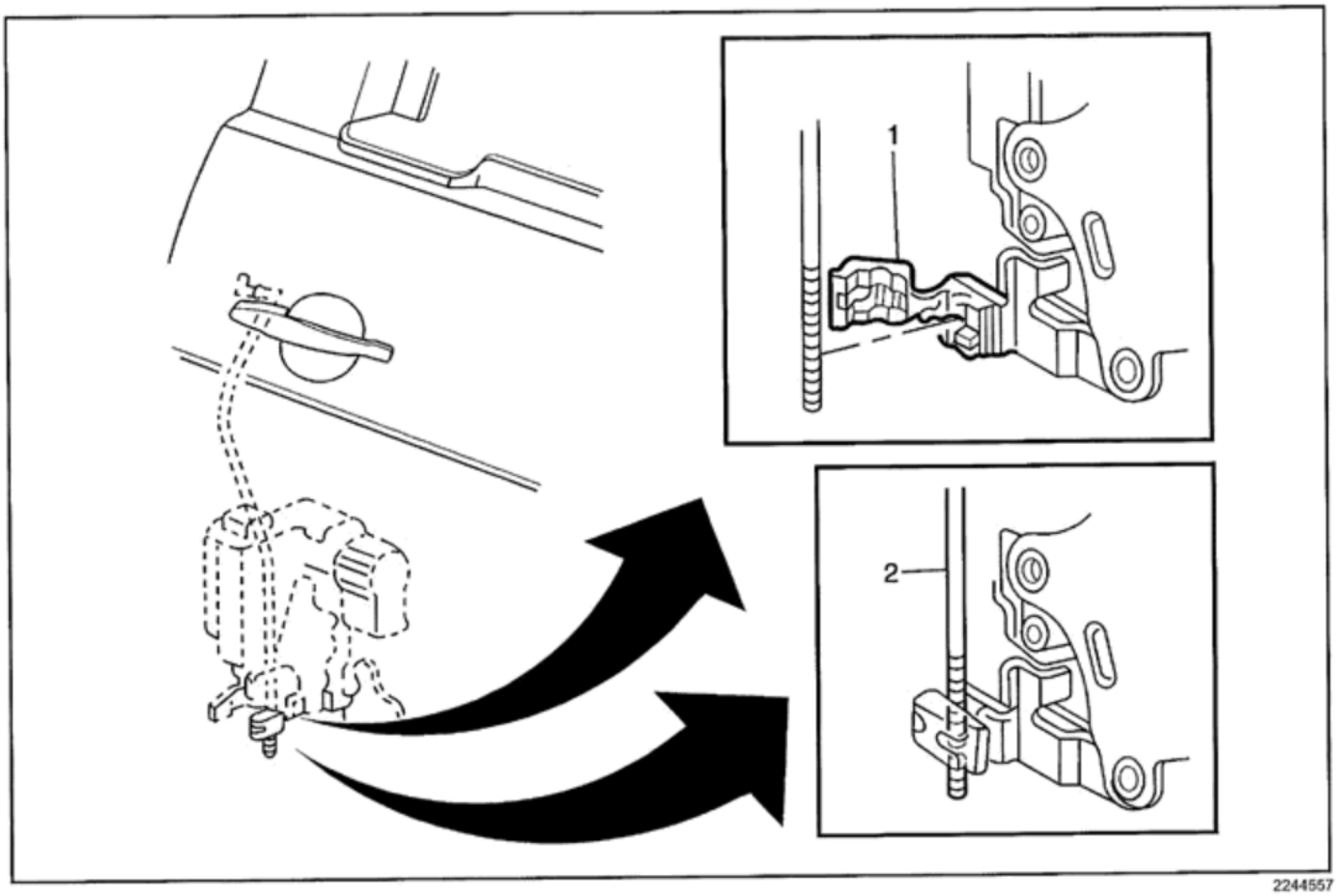


2425048

Rear Side Door Locking Rod Bellcrank Replacement

Callout	Component Name
Preliminary Procedures Remove the rear side door trim panel. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*.	
1	Rear Side Door Lock Rod Bellcrank Center Retainer **Procedure** 1. Place the window in the full up position. 2. Remove the water deflector. **Note:** Use a small flat-bladed tool to release the retainer from the center of the bellcrank.
2	Rear Side Door Lock Rod Bellcrank Center
3	Rear Side Door Lock Rod Bellcrank Retainer to Door **Note:** Inspect the door lock system for proper operation before installing the door trim panel.

Rear Side Door Outside Handle Rod Adjustment

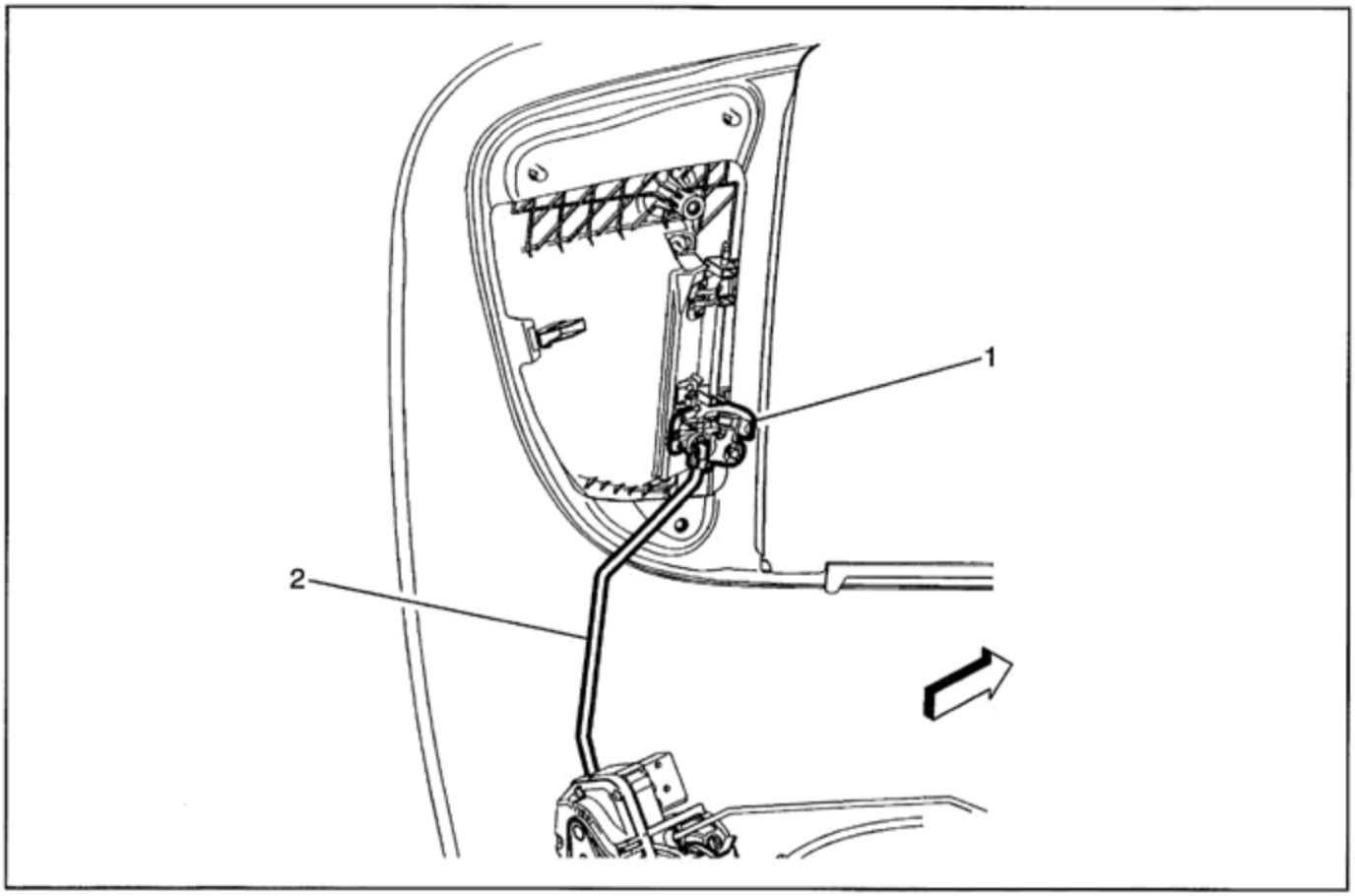


2244557

Rear Side Door Outside Handle Rod Adjustment

Callout	Component Name
Preliminary Procedures Remove the rear side door trim panel. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*.	
1	Rear Side Door Outside Handle Rod Retainer **Procedure** Remove the rear side door water deflector.
2	Rear Side Door Outside Handle Rod **Procedure** 1. Position the rear side door outside handle rod in the retainer in order to eliminate any free play in the outside door handle. 2. Adjust the travel of the handle by removing the threaded rod from the retainer. 3. Install the retainer cover closed over the threaded front side door outside handle rod. 4. Inspect the door locking system for proper operation before installing the trim panel. **Tip:** Use a flat-head tool to open the retainer from the threaded rod connecting the lock to the outside handle.

Rear Side Door Outside Handle Rod Replacement (Hatchback)

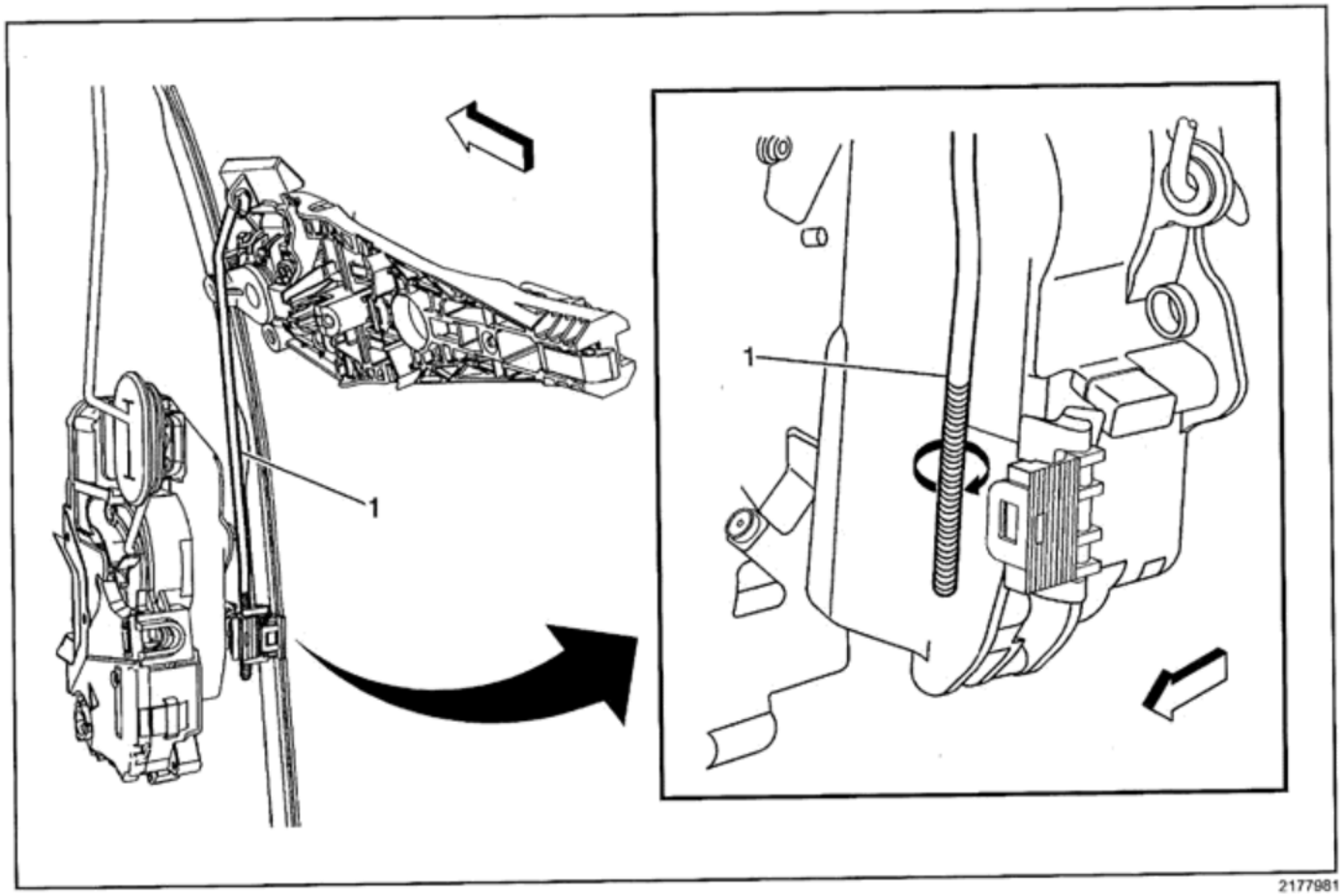


2425045

Rear Side Door Outside Handle Rod Replacement (Hatchback)

Callout	Component Name
Preliminary Procedures Remove the rear side door trim. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*.	
1	Rear Side Door Outside Handle Rod Upper Retainer **Procedure** Remove the water deflector
2	Rear Side Door Outside Handle Rod **Procedure** 1. Use a flat-head tool to open the lower retainer from the threaded rod connecting the lock to the outside handle. 2. Position the rear side door outside handle rod in the retainer in order to eliminate any free play in the outside door handle. 3. Adjust the travel of the handle by removing the threaded rod from the retainer. 4. In order to prevent outside handle lever pre-load, lock the outside handle shall be fully secured to the door prior to securing integral lock clip to outside handle rod. Integral lock clip shall be in the full up position while securing to outside handle rod. Refer to *Rear Side Door Outside Handle Rod Adjustment on page 4-311*. 5. Inspect the door lock system for proper operation before installing the trim panel.

Rear Side Door Outside Handle Rod Replacement (Sedan)



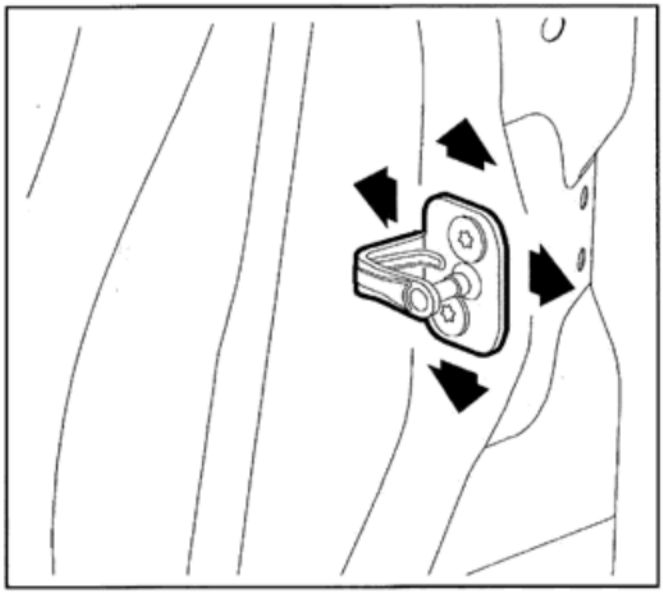
2177981

Rear Side Door Outside Handle Rod Replacement (Sedan)

Callout	Component Name
Preliminary Procedures Remove the rear side door trim panel. Refer to *Rear Side Door Trim Replacement (Sedan) on page 2-84* or *Rear Side Door Trim Replacement (Hatchback) on page 2-83*.	
1	Rear Side Door Outside Handle Rod **Procedures** 1. Remove the rear side door water deflector. 2. Open the handle rod clip. 3. Inspect the door locking system for proper operation before installing the trim panel. Refer to *Rear Side Door Outside Handle Rod Adjustment on page 4-311*.

Front Side Door Lock Striker Adjustment

To determine if striker adjustment is required, proceed as follows:



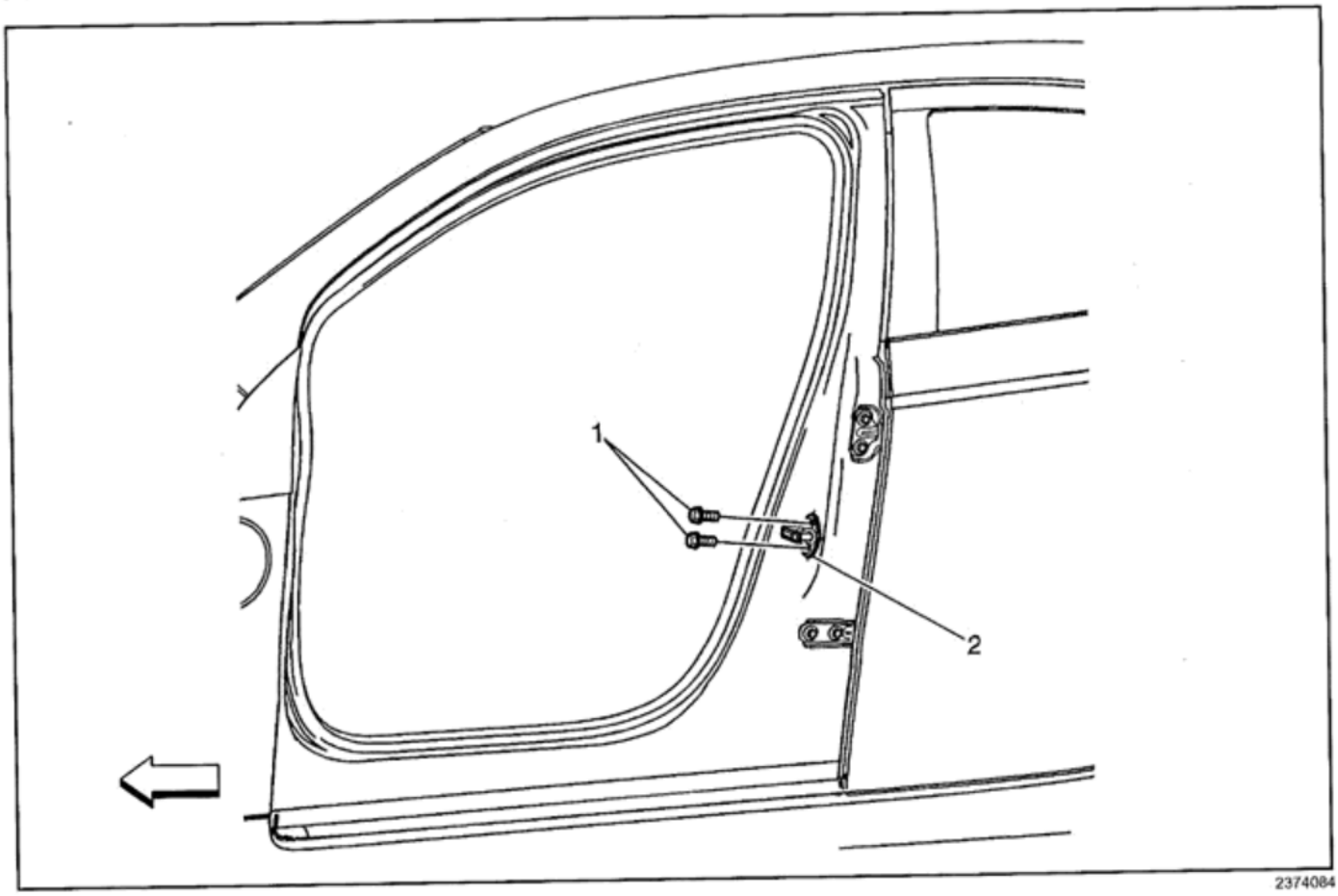
928781

1. Ensure the door is properly aligned within the door opening before proceeding with the striker adjustment.
2. Close the door onto the striker and note if the door drags on the striker causing the door to move upward or downward upon contact with the striker. Also note the closing effort to fully engage the lock.
3. Using a grease pencil, mark around the striker for reference of the original position. Loosen the striker.
4. Move the striker to eliminate drag on the striker and door lock and to achieve the proper door position within the door opening. Start with the up/down position, then position the striker to achieve proper alignment to the door opening. Set the in/out adjustment for the proper door seal engagement making sure the door closing efforts are correct.

Caution: Refer to *Fastener Caution on page 0-8*.

5. Tighten the striker bolts. Tighten the front side door striker screws to **22 N•m (16 lb ft).**

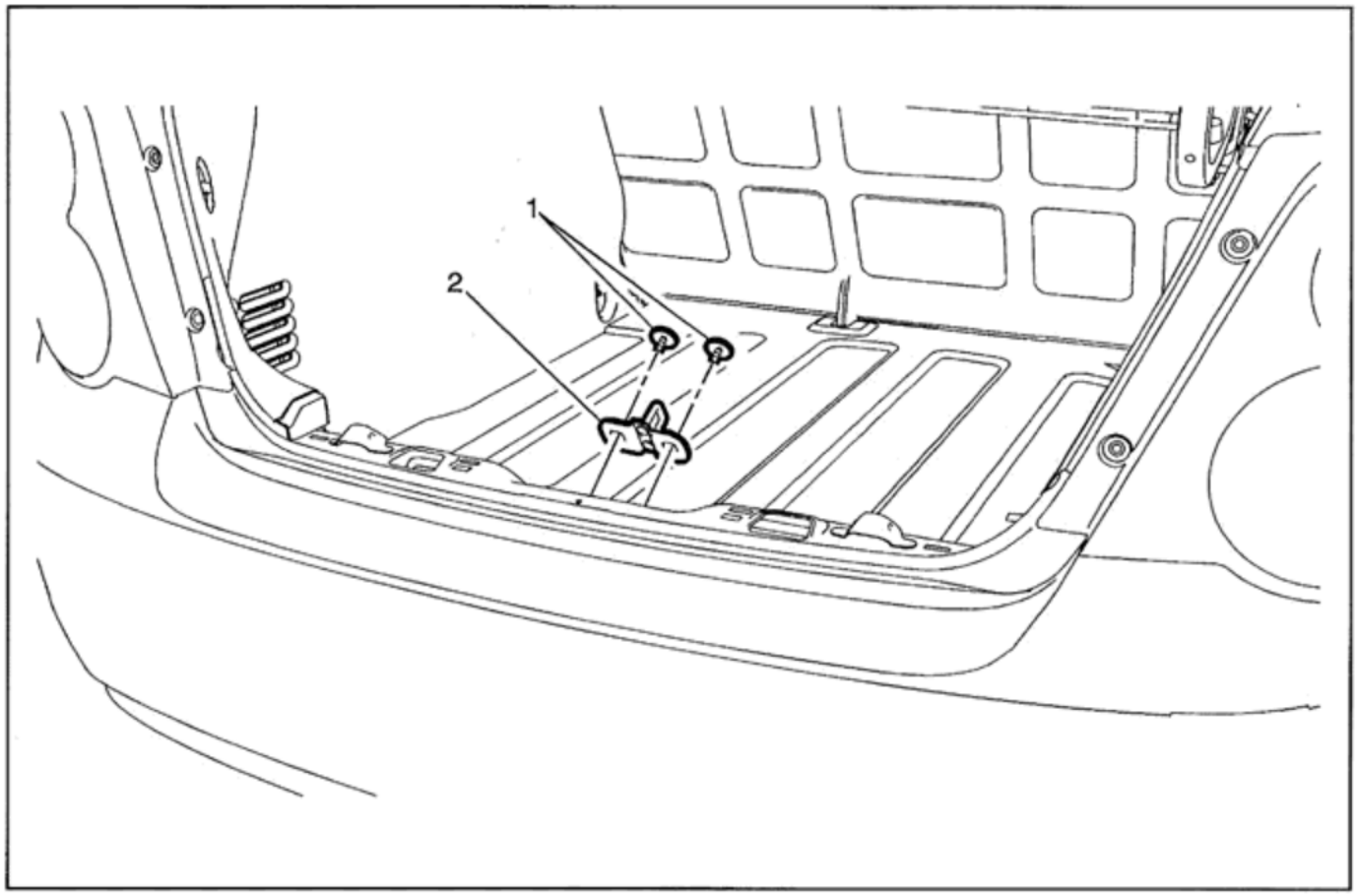
Front Side Door Lock Striker Replacement



Front Side Door Lock Striker Replacement

Callout	Component Name
1	Front Door Lock Striker Screws (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8.* **Tighten** 22 N•m (16 lb ft)
2	Front Door Lock Striker **Procedure** Ensure the alignment of the striker. Refer to *Front Side Door Lock Striker Adjustment on page 4-314.*

Liftgate Latch Striker Replacement

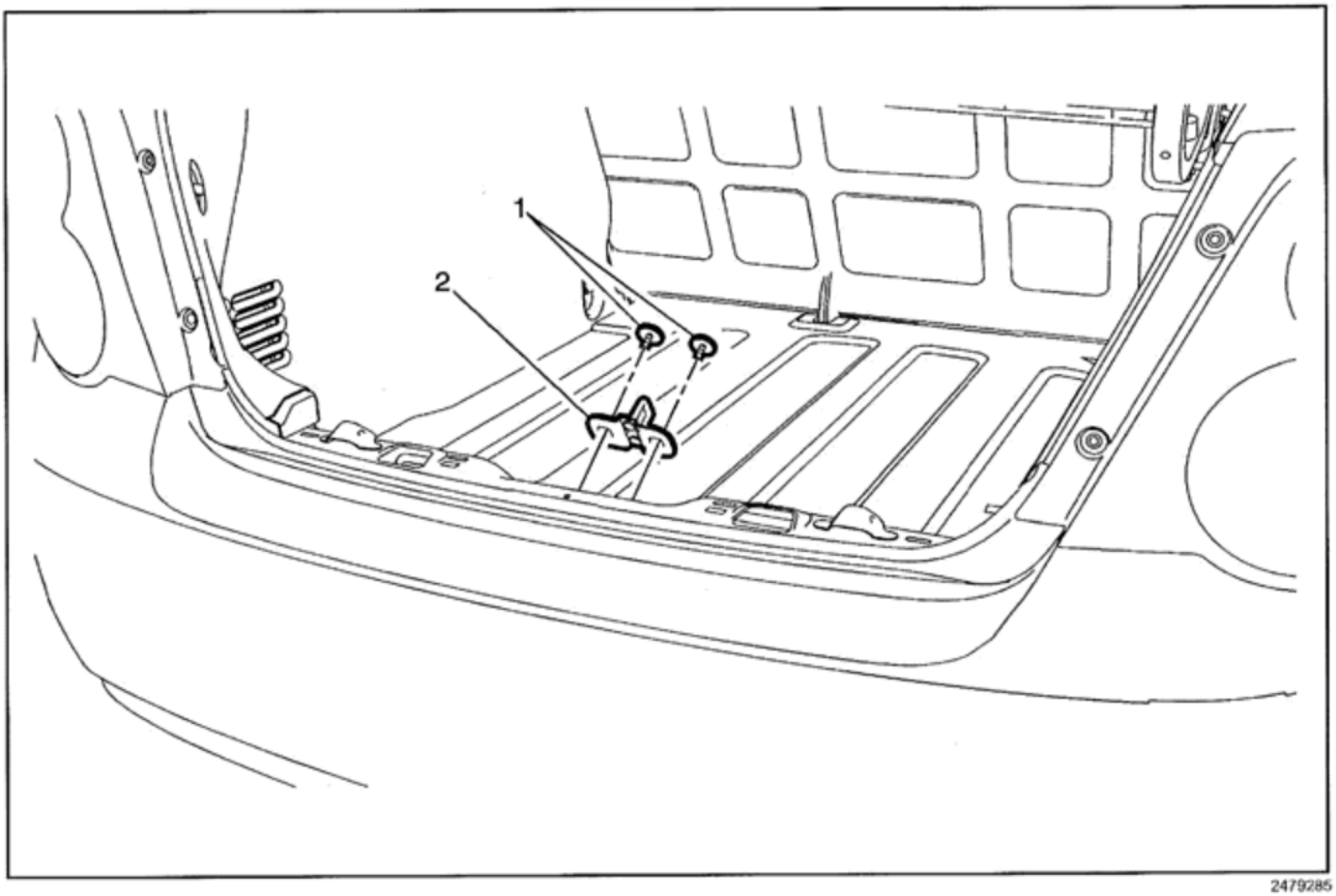


2479285

Liftgate Latch Striker Replacement

Callout	Component Name
Preliminary Procedure Remove the rear compartment sill trim plate. Refer to *Rear Compartment Sill Trim Plate Replacement on page 2-87*.	
1	Liftgate Latch Striker Bolt (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8*. **Tighten** 22 N•m (16 lb ft)
2	Liftgate Latch Striker

Rear Compartment Lid Latch Striker Replacement



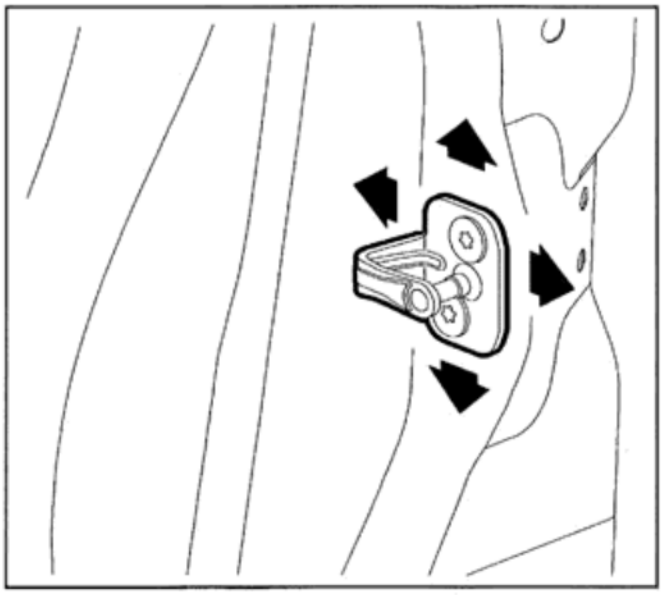
2479285

Rear Compartment Lid Latch Striker Replacement

Callout	Component Name
Preliminary Procedure Remove the rear compartment sill trim plate. Refer to *Rear Compartment Sill Trim Plate Replacement on page 2-87*.	
1	Latch Striker Bolt (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8*. **Tighten** 22 N•m (16 lb ft)
2	Rear Compartment Lid Latch Striker

Rear Side Door Lock Striker Adjustment

To determine if striker adjustment is required, proceed as follows:



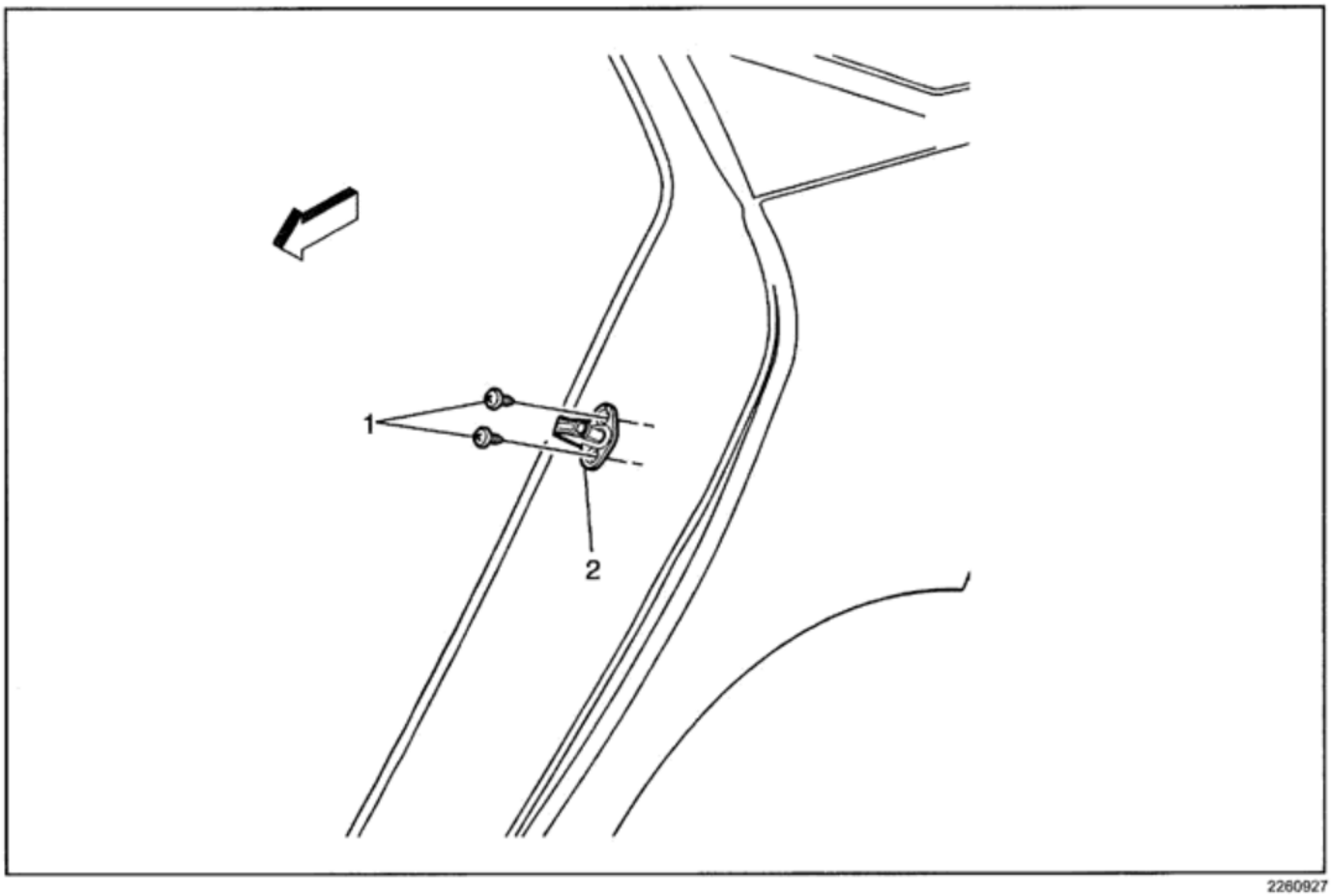
928781

1. Ensure the door is properly aligned within the door opening before proceeding with the striker adjustment.
2. Close the door onto the striker and note if the door drags on the striker causing the door to move upward or downward upon contact with the striker. Also note the closing effort to fully engage the lock.
3. Using a grease pencil, mark around the striker for reference of the original position. Loosen the striker.
4. Move the striker to eliminate drag on the striker and door lock and to achieve the proper door position within the door opening. Start with the up/down position, then position the striker to achieve proper alignment to the door opening. Set the in/out adjustment for the proper door seal engagement making sure the door closing efforts are correct.

Caution: Refer to *Fastener Caution on page 0-8.*

5. Tighten the striker bolts. Tighten the rear side door striker bolts to **22 N•m (16 lb ft).**

Rear Side Door Lock Striker Replacement

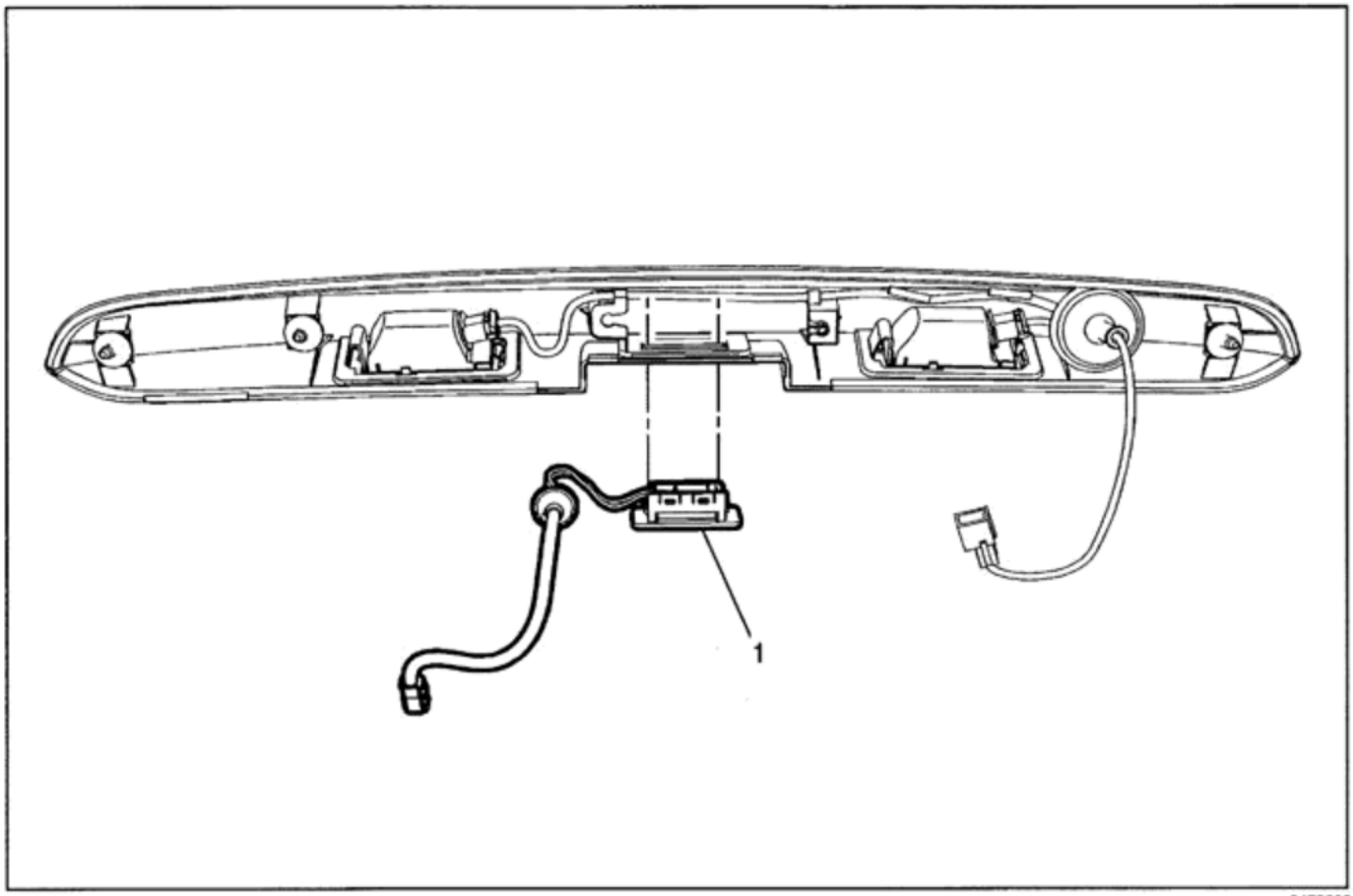


2260927

Rear Side Door Lock Striker Replacement

Callout	Component Name
1	Rear Side Door Lock Striker Screw (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8.* **Tighten** 22 N•m (16 lb ft)
2	Rear Side Door Lock Striker **Procedures** 1. Ensure the spacer is in place. 2. Ensure proper alignment after installation. Refer to *Rear Side Door Lock Striker Adjustment on page 4-318.*

Liftgate Release Switch Replacement

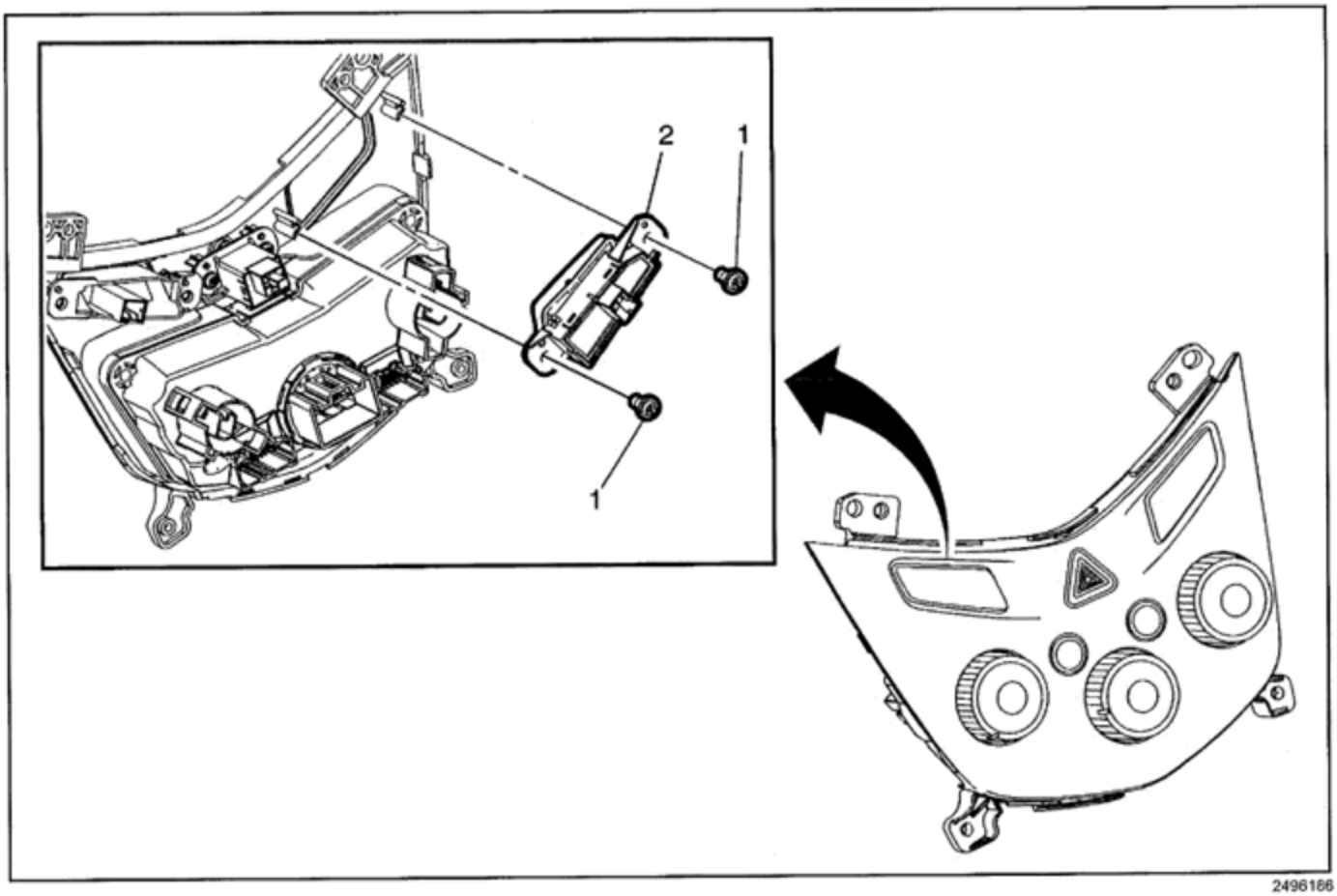


2479292

Liftgate Release Switch Replacement

Callout	Component Name
Preliminary Procedure Remove the liftgate side applique. Refer to *Liftgate Side Applique Replacement (Hatchback) on page 2-5*.	
1	Liftgate Release Switch **Procedure** Depress the retainers on the back side of the switch and push the switch out from the applique.

Door Lock Switch Replacement



2496166

Door Lock Switch Replacement

Callout	Component Name
Preliminary Procedure Remove the heater and air conditioning control. Refer to *Heater and Air Conditioning Control Replacement on page 10-79*.	
1	Door Lock Switch Bolts (Qty: 2) **Caution:** Refer to *Fastener Caution on page 0-8*.
2	Door Lock Switch **Procedure** Disconnect the electrical connector.

Description and Operation

Door Ajar Indicator Description and Operation

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- Body control module (BCM)
- Instrument panel cluster
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Liftgate latch
- Rear compartment lid latch
- Driver window motor

Driver Door Ajar (AXG)

The driver window motor supplies a 12 V signal to the door ajar switch within the door latch, when the driver door is open the door ajar switch closes pulling the 12 V signal low. When the driver window motor detects the drop in the 12 V signal circuit, it will then communicate this status to the BCM via local interconnect network (LIN) bus. The BCM communicates with the instrument cluster via serial data message. The instrument panel cluster, upon receipt of this serial data message, will illuminate the driver door ajar indicator and also send a serial data message to the radio to activate the door ajar audible warning when the vehicle speed is greater then 8 km/h (5 mph).

Driver/Passenger/Rear Door Ajar (Without AXG)

The body control module (BCM) supplies a 12 V signal to each of the door latches, these latches contain an ajar switch which is normally open when the door is closed. When a door is ajar or open, the contacts of the ajar switch will close causing the voltage in the signal circuit to drop to zero volts. The BCM will detect the voltage drop and will send a message to the instrument panel cluster. The instrument panel cluster, upon receipt of this message, will illuminate the appropriate door ajar message in the driver information center and also send a message to the radio to activate the door ajar audible warning when the vehicle speed is greater then 8 km/h (5 mph).

Trunk/Liftgate Ajar

The body control module (BCM) provides a 12 V signal to the trunk ajar signal circuit. The liftgate latch and the rear compartment lid latch contain an ajar switch which is normally open when the trunk or liftgate is closed. When the liftgate or trunk or is opened, the normally open ajar switch closes. With the ajar switch closed, ground is provided to the ajar switch signal circuit. The BCM detects the voltage drop and sends a serial data message to the instrument panel to display the door ajar indicator

Luggage Compartment Description and Operation

Luggage Compartment Release System Components

- Body control module (BCM)
- Exterior rear compartment lid release switch (Sedan)
- Liftgate unlatch switch (Hatchback)
- Rear compartment lid latch (Sedan)
- Liftgate latch (Hatchback)
- Rear compartment lid release relay (Sedan)
- Liftgate release relay (Hatchback)

Luggage Compartment Release Operation

Trunk/Liftgate Release Switch

The BCM monitors supplies a 12 V signal to the release switch so that when the switch is pressed, the voltage within the signal circuit is pulled low and in response, the BCM will detect the voltage drop and check the status of the door lock system. If the doors are locked, the BCM will ignore the request, if the All Doors Unlocked has been commanded, the BCM will recognize the request and will provide voltage to the release relay.

Rear Compartment Lid Latch

When BCM receives a rear compartment release command from the release switch, the BCM applies brief pulse of voltage to the release relay control circuit, which energizes the coil side of the relay. The switch side of the release relay then momentarily closes, supplying a brief pulse of battery positive voltage to the rear compartment latch. The rear compartment latch is continuously grounded and when it receives the voltage pulse, it will become energized and the latch will activate releasing the trunk lid or liftgate so that the trunk lid or liftgate may be manually raised to an open position.

Keyless Entry Transmitter

The BCM may also get a rear compartment release command from the remote keyless entry module. When the trunk button is pressed on the keyless entry transmitter, a rear compartment release request is sent to the remote keyless entry module, the remote keyless entry module will then send a serial data message to the BCM to command the release of the trunk/liftgate.

Power Door Locks Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Central door lock switch
- Child door lockout switch
- Door lock actuators in each of the doors
- Body control module (BCM)
- Underhood fuse block

Door Lock System Controls

The power door lock system can be controlled by any of the following:

- A door lock switch LOCK or UNLOCK activation
- A mechanical key cylinder lock/unlock
- A keyless entry transmitter activation
- An automatic door lock activation
- An automatic door unlock activation

Door Lock Operation

When a door lock switch is activated in the lock or unlock position the body control module (BCM) will receive a ground signal on either the door lock switch lock or unlock signal circuits.

The BCM, upon receipt of a lock switch lock or unlock signal, will supply voltage to the door lock actuator lock or unlock control circuits. Since the opposite side of the lock actuator is connected to ground through the other lock actuator control circuit, the doors will then lock or unlock as commanded.

The following three circuits are used to operate the lock:

- Driver door unlock
- Passenger door unlock
- All door lock

Child Door Lockout Operation

The operator has the option to disable the interior rear door handles to prevent the unauthorized opening of the rear door doors while still retaining normal rear exterior door handle functions. When the child door lockout switch is pressed, the BCM will energize the door lock security relay, send a 12V pulse to the rear door latches activating the lockout feature and will command the child lockout indicator to illuminate. The rear door plungers will still function normally by pressing the central door lock switch but the child lockout latches will disable the interior rear door handles. Pressing the child lockout switch again will signal a command to the BCM which will de-energize the door lock security relay, send a 12V pulse to the rear door latches to de-active the lockout feature and restore normal interior rear door handle functions and the turn off the child lockout indicator.

The rear door latches contain switches that are open when the rear doors are not locked out and closed when the rear doors are locked out which is monitored by the BCM to determine the lockout status of rear door latches

If the child lockout indicator flashes while trying to lockout the rear door handles indicates that there is a fault detected in the child lockout system and one or both interior rear door handles may not be disabled.