

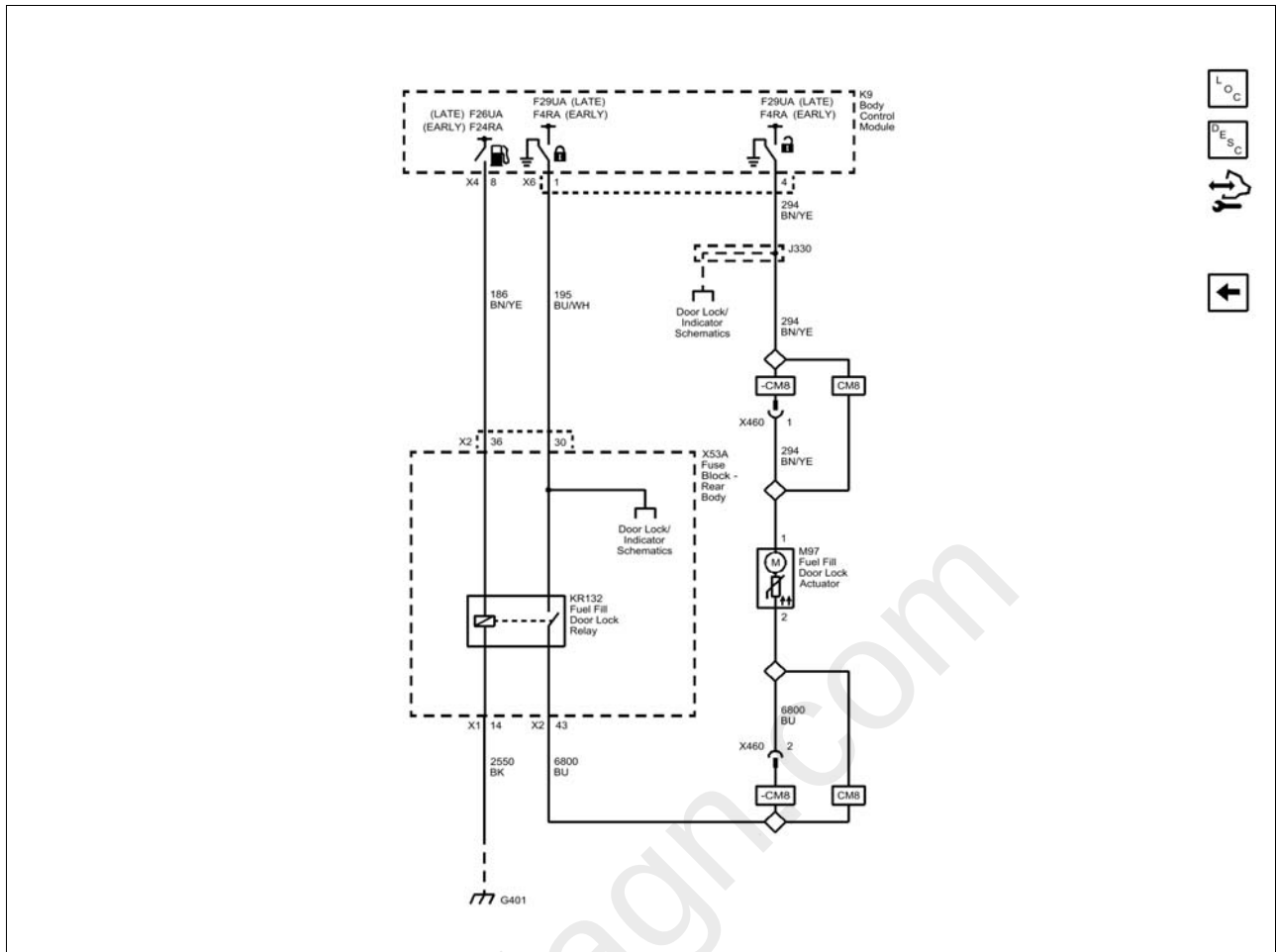
Service Manual: POWER DOOR LOCK SYSTEM AND
RELEASE SYSTEMS

SPECIFICATIONS > FASTENER SPECIFICATIONS

Application	Specification	
	Metric	English
Front Side Door Inside Handle Cover Fastener	2 N.m	13 lb in
Front Side Door Latch Bolt	9 N.m	80 lb in
Front Side Door Latch Striker Bolt	25 N.m	18 lb ft
Front Side Door Outside Handle Bracket Screw	5 N.m	44 lb in
Front Side Door Outside Handle Lock Cylinder Screw	4 N.m	31 lb in
Rear Compartment Lid Latch Bolt	12 N.m	106 lb ft
Rear Compartment Lid Latch Striker Bolt	10 N.m	89 lb in

**SCHEMATIC WIRING DIAGRAMS > RELEASE SYSTEMS WIRING SCHEMATICS >
FUEL DOOR LOCK (N08)**

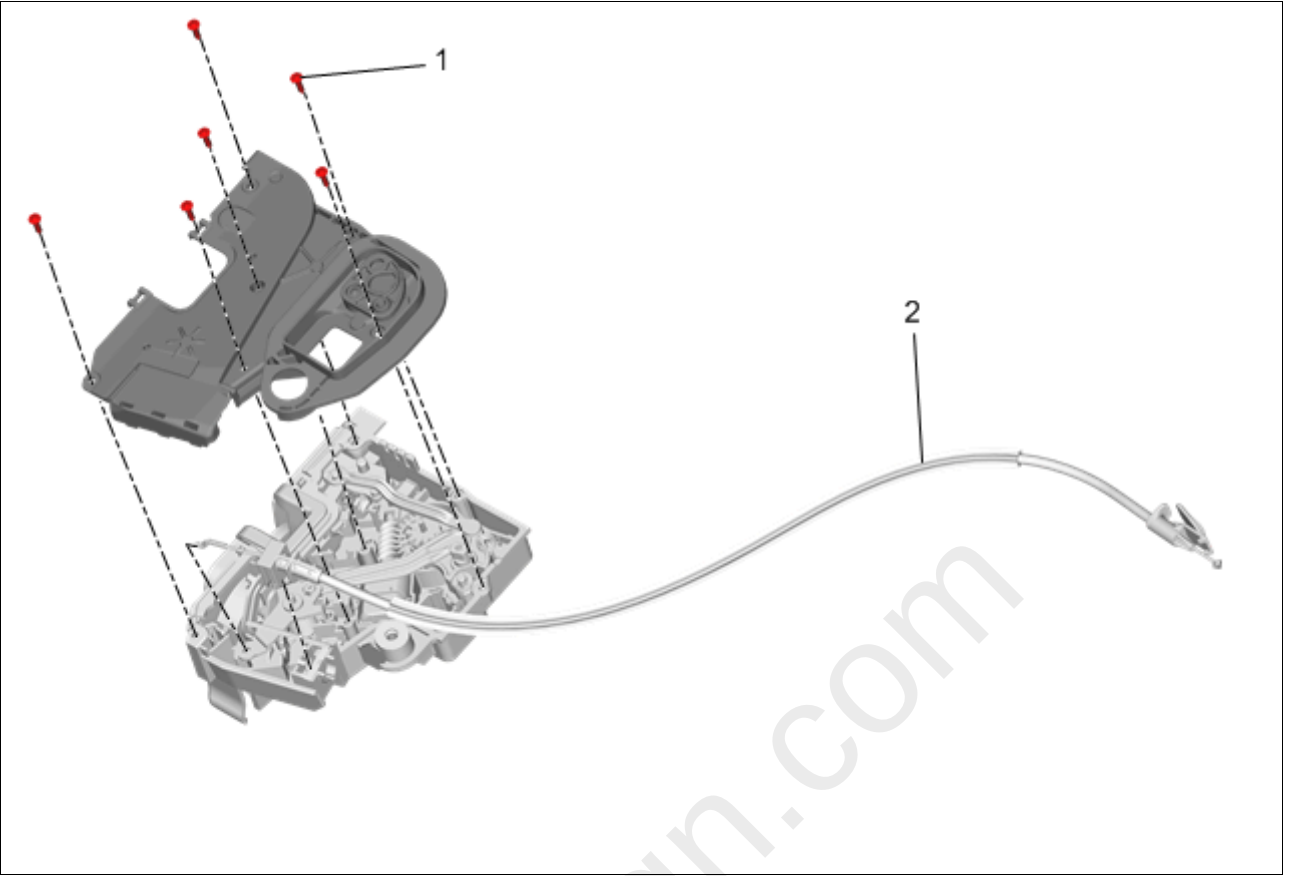
Fig 1: Fuel Door Lock (N08)



Courtesy of GENERAL MOTORS COMPANY

REPAIR INSTRUCTIONS > FRONT SIDE DOOR INSIDE HANDLE CABLE REPLACEMENT

Fig 1: Front Side Door Inside Handle Cable



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Side Door Latch Replacement	
1	Front Side Door Inside Handle Cable Cover Fastener (Qty: 6)
	CAUTION: Refer to Fastener Caution .
	Tighten 1.5 N.m (13 lb in)
2	Front Side Door Inside Handle Cable
	Procedure
	1. Remove the latch cover from the latch. 2. Release the cable end from the latch.

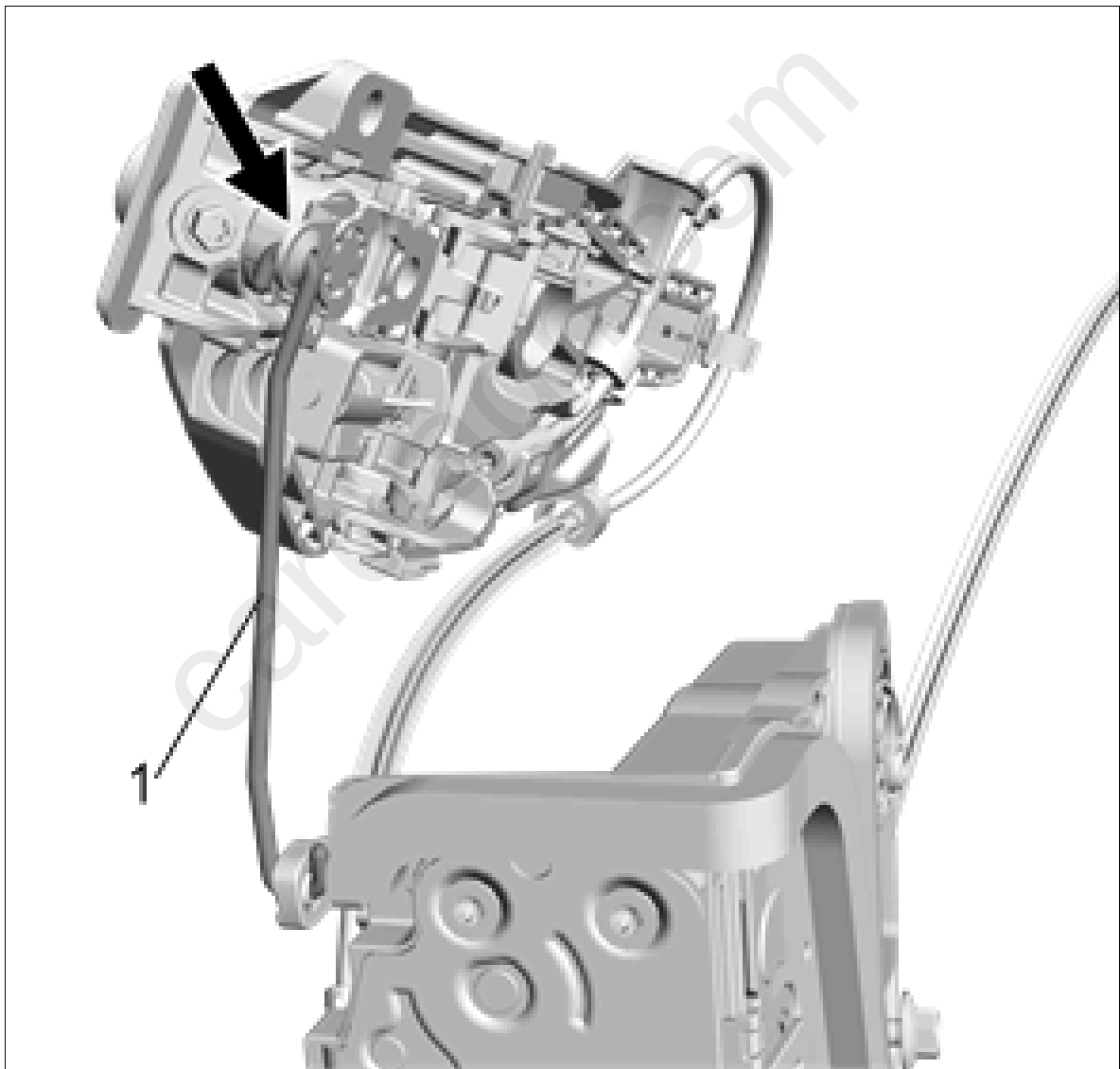
REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK CYLINDER REPLACEMENT > REMOVAL PROCEDURE

 NOTE:

When performing this procedure the latch and handle bracket assembly Must be removed from the vehicle to replace the door lock cylinder assembly.

1. Remove Front Side Door Latch Replacement

Fig 1: Front Side Door Lock Cylinder Rod



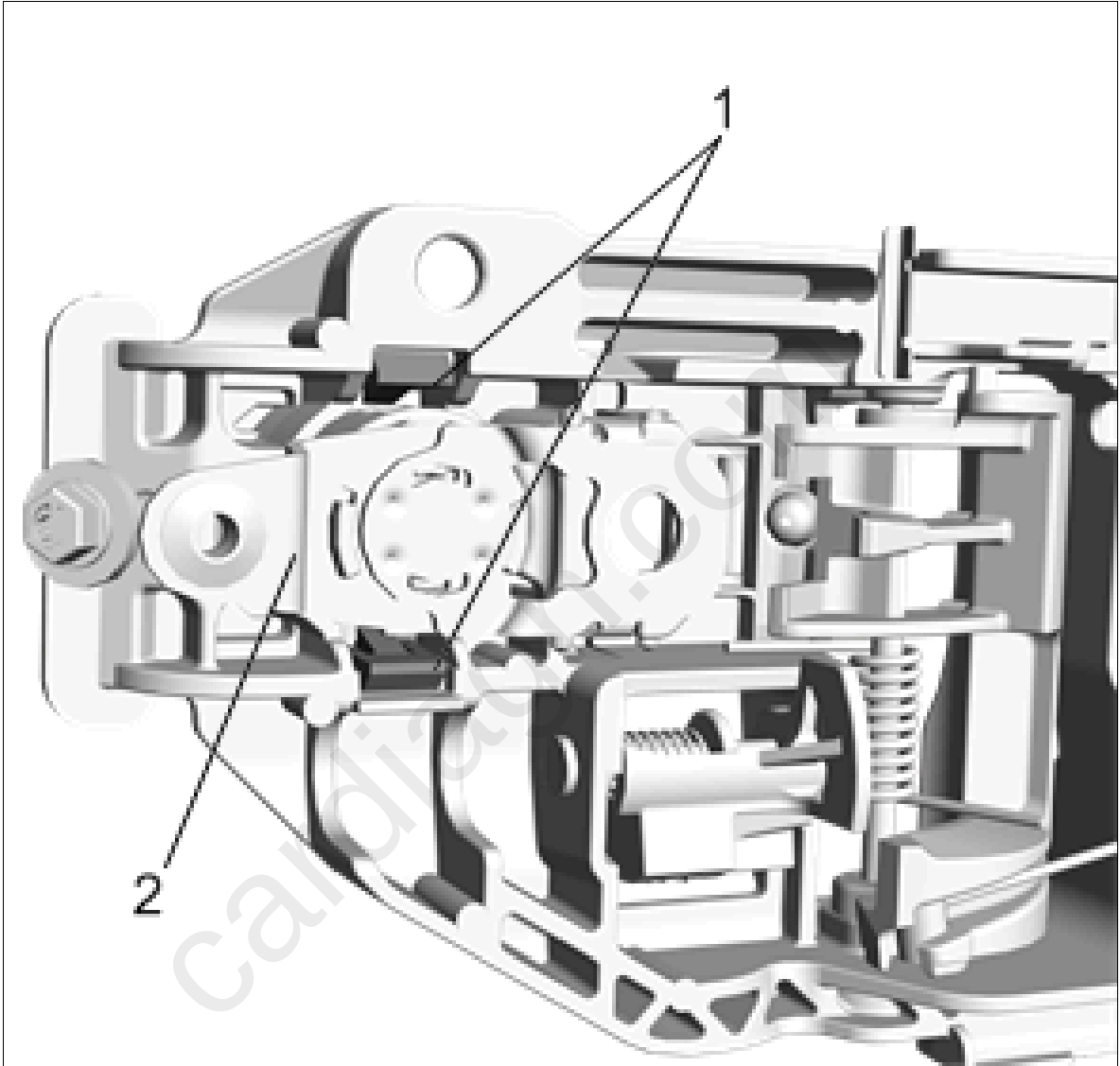
Courtesy of GENERAL MOTORS COMPANY

 NOTE:

Its not necessary to disconnect the inside or outside handle cables to replace the door lock cylinder.

2. Remove Front Side Door Lock Cylinder Rod (1) at Front Side Door Lock Cylinder.

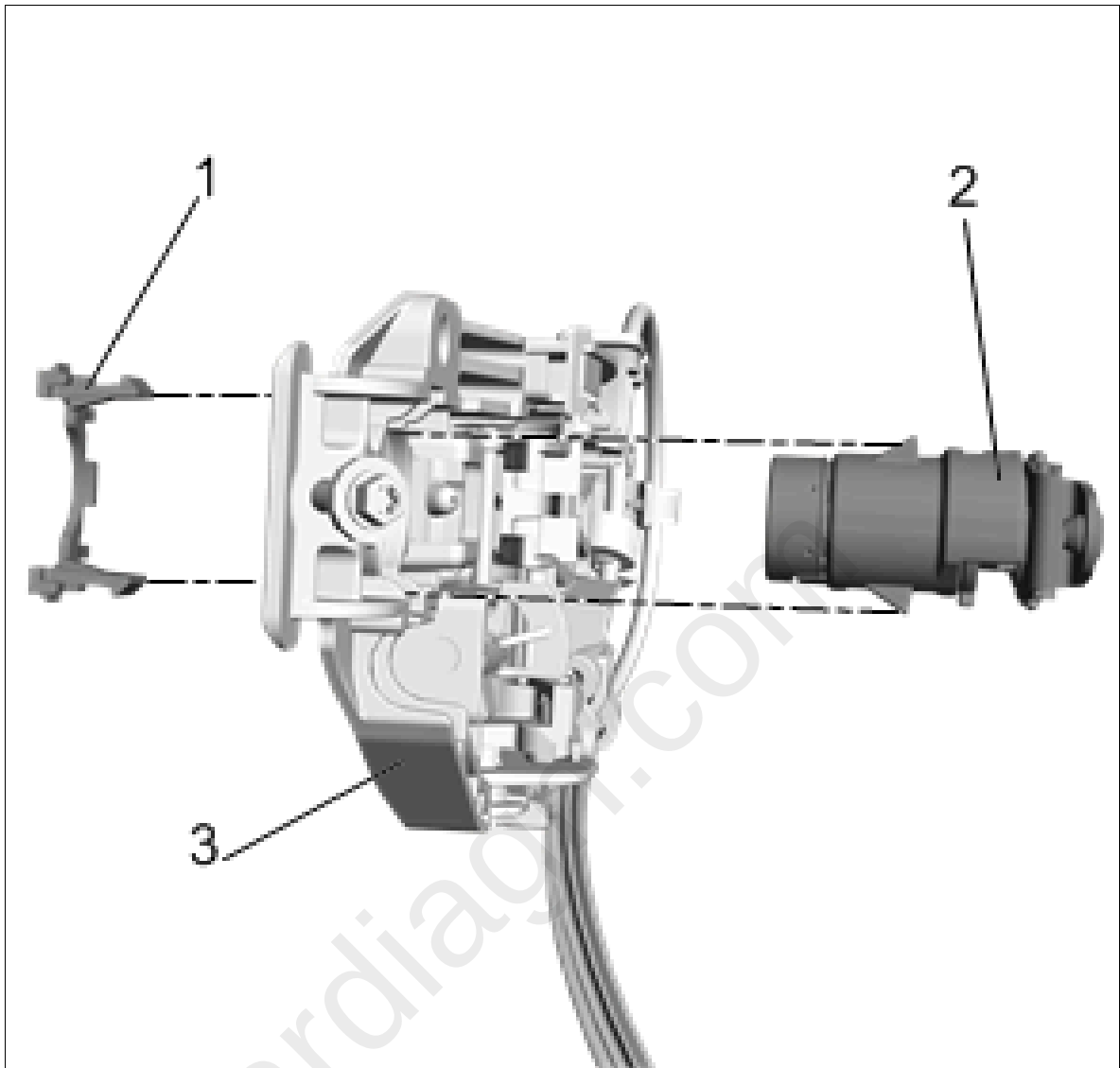
Fig 2: Lock Cylinder Retainers



Courtesy of GENERAL MOTORS COMPANY

3. From the back side of the outside handle bracket, use a suitable tool, push up and down on the lock cylinder retainers (1) releasing the retainer from the cylinder (2).

Fig 3: Lock Cylinder Retainer, Pull The Lock Cylinder, Handle Bracket

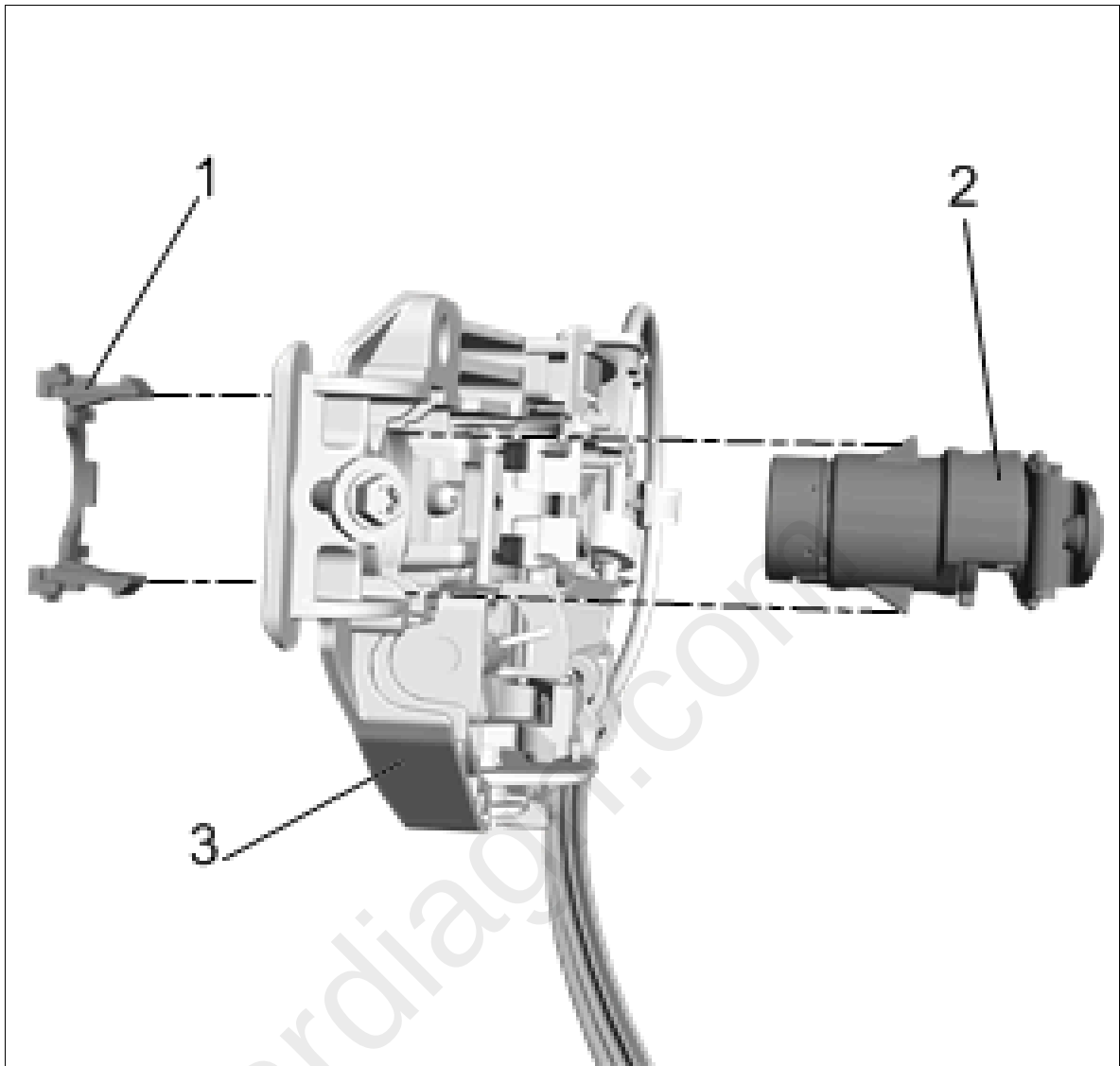


Courtesy of GENERAL MOTORS COMPANY

4. With the lock cylinder retainer (1) removed, pull the lock cylinder (2) rearward releasing it from the handle bracket (3).

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK CYLINDER REPLACEMENT > INSTALLATION PROCEDURE

Fig 1: Lock Cylinder Retainer, Pull The Lock Cylinder, Handle Bracket



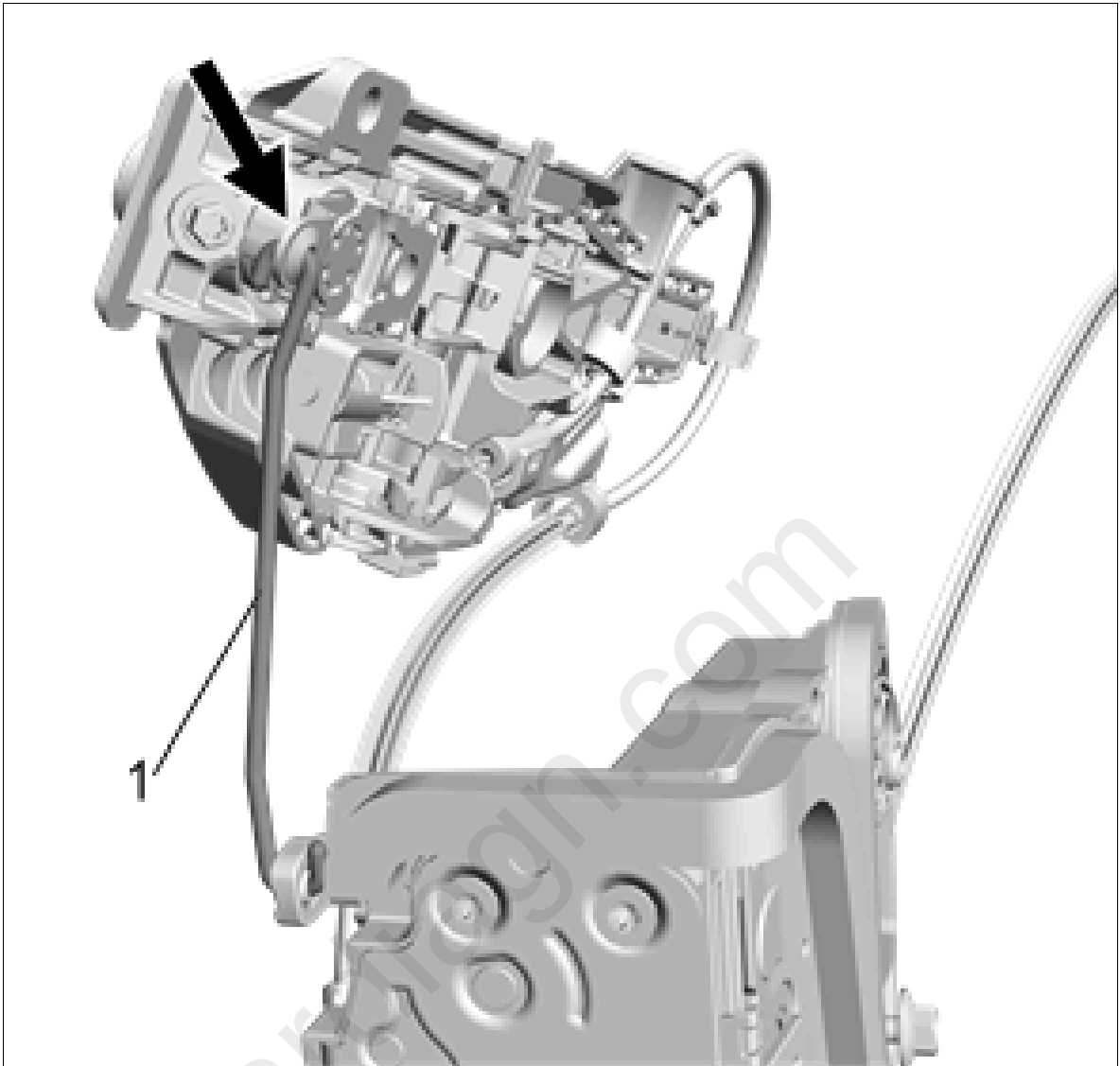
Courtesy of GENERAL MOTORS COMPANY

 NOTE:

Ensure that the door lock cylinder is engage all the way into the side door handle locator tabs. Insert the key into the door lock cylinder, turn left to right checking for binding before install the assembly to the vehicle.

1. Install the lock cylinder retainer (1) to the front side door outside handle bracket assembly (3).
2. Install the door lock cylinder (2) in the front side door outside handle bracket, push forward locking the lock cylinder (2) into the lock cylinder retainer.

Fig 2: Front Side Door Lock Cylinder Rod

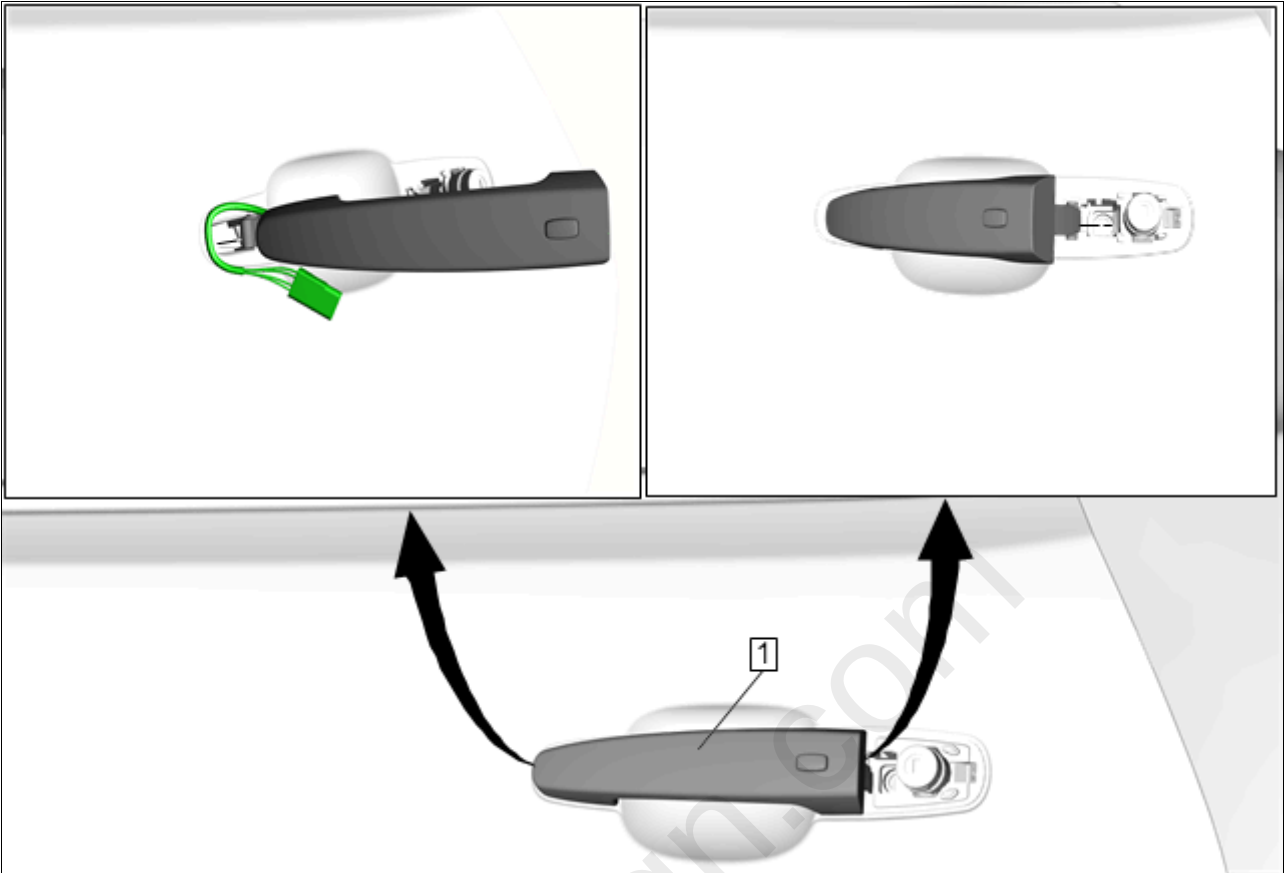


Courtesy of GENERAL MOTORS COMPANY

3. Install Front Side Door Lock Cylinder Rod (1) at Front Side Door Lock Cylinder.
4. Install Front Side Door Latch Replacement .
5. Ensure that the door lock system operates properly before installing the trim.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR OUTSIDE HANDLE REPLACEMENT

Fig 1: Front Side Door Outside Handle



Courtesy of GENERAL MOTORS COMPANY

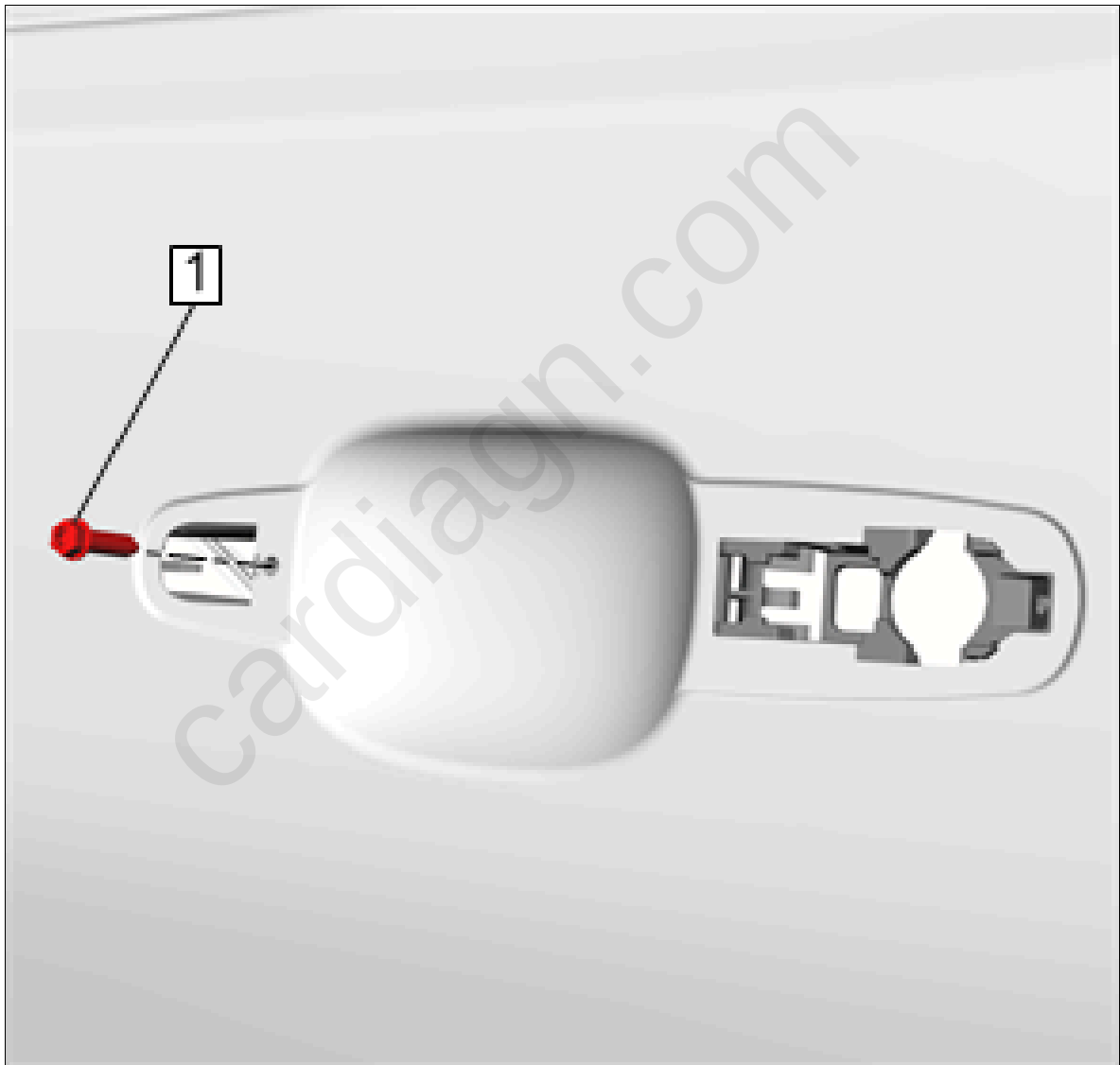
Callout	Component Name
Preliminary Procedure 1. Front Side Door Lock Cylinder Opening Cover Replacement 2. Front Side Door Trim Replacement 3. Remove the front side door water deflector. 4. Disconnect the electrical connector.	
1	Front Side Door Outside Handle 1. Pull the front side door outside handle outward and hold it in the open position. 2. Slide the front side door outside handle rearward and then outwards in a swinging motion releasing the handle from the front side door outside handle bracket. 3. Install the front side door outside handle into the handle bracket. 4. While screwing in the screw for the lock cylinder opening cover, 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.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR OUTSIDE HANDLE BRACKET REPLACEMENT > REMOVAL PROCEDURE

1. Remove Front Side Door Outside Handle Replacement .
2. Remove Front Side Door Latch Replacement .

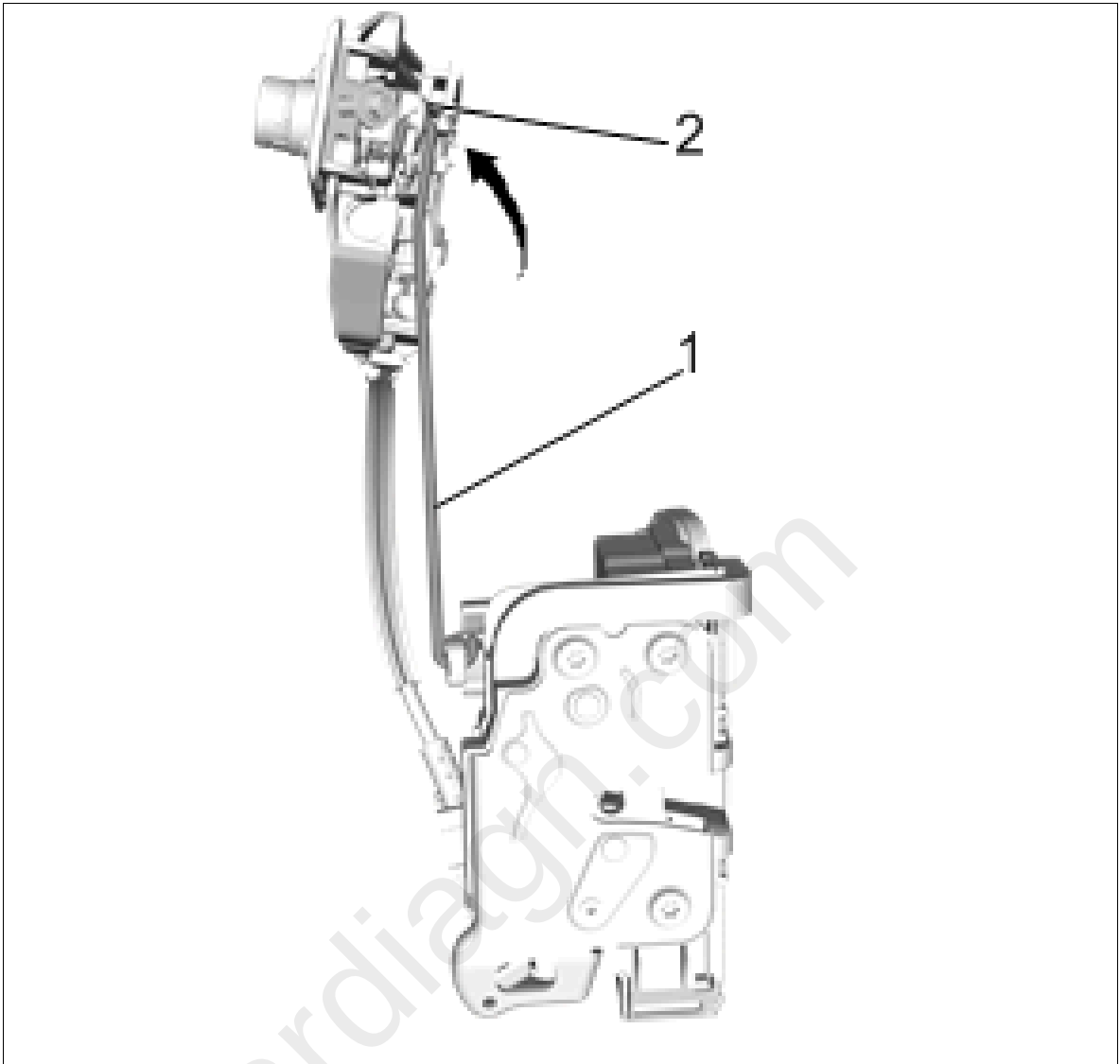
Fig 1: Front Side Door Outside Handle Bracket Screw



Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Side Door Outside Handle Bracket Screw (1).

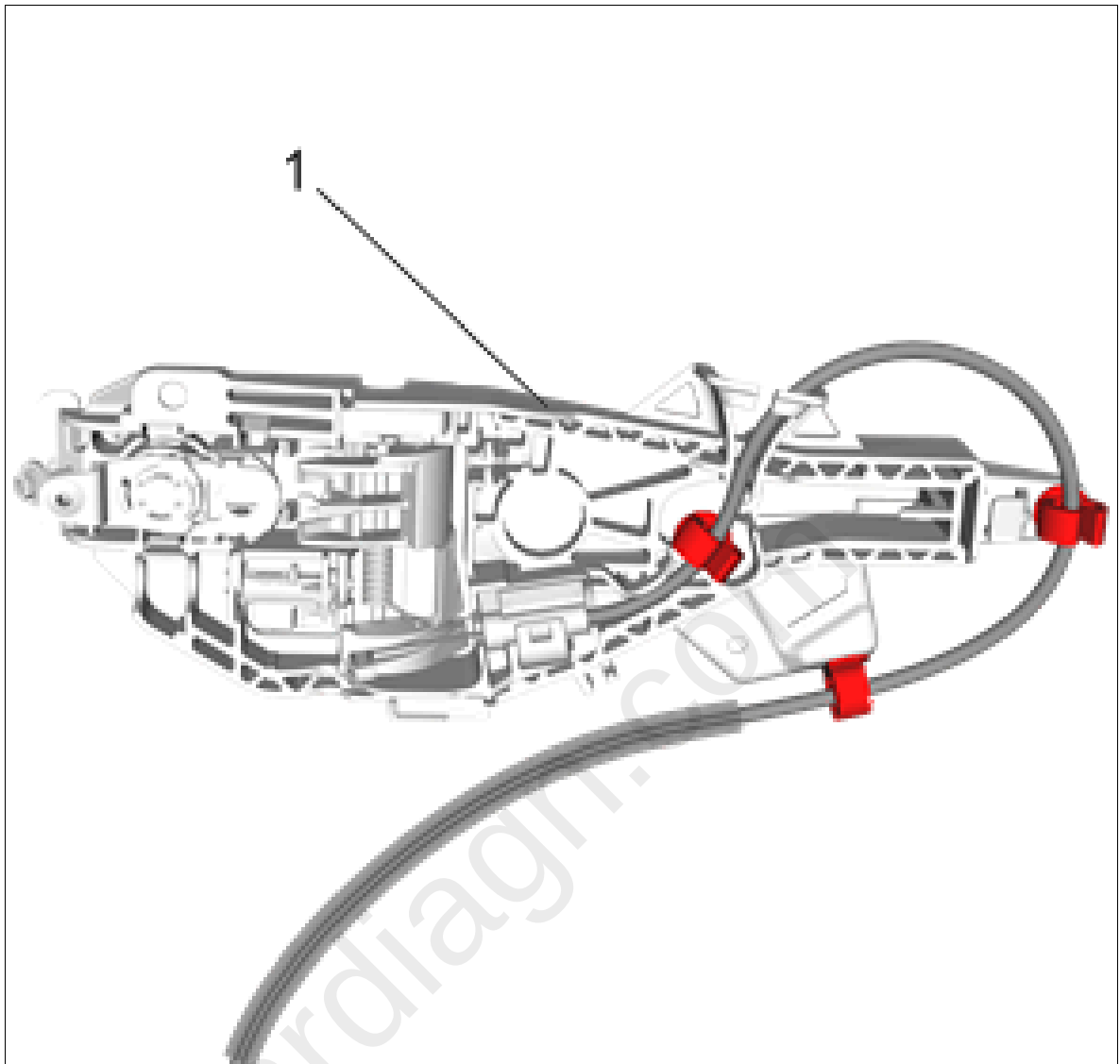
Fig 2: Front Side Door Lock Rod, Front Side Door Lock Cylinder



Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Side Door Lock Rod (1) at Front Side Door Lock Cylinder (2).

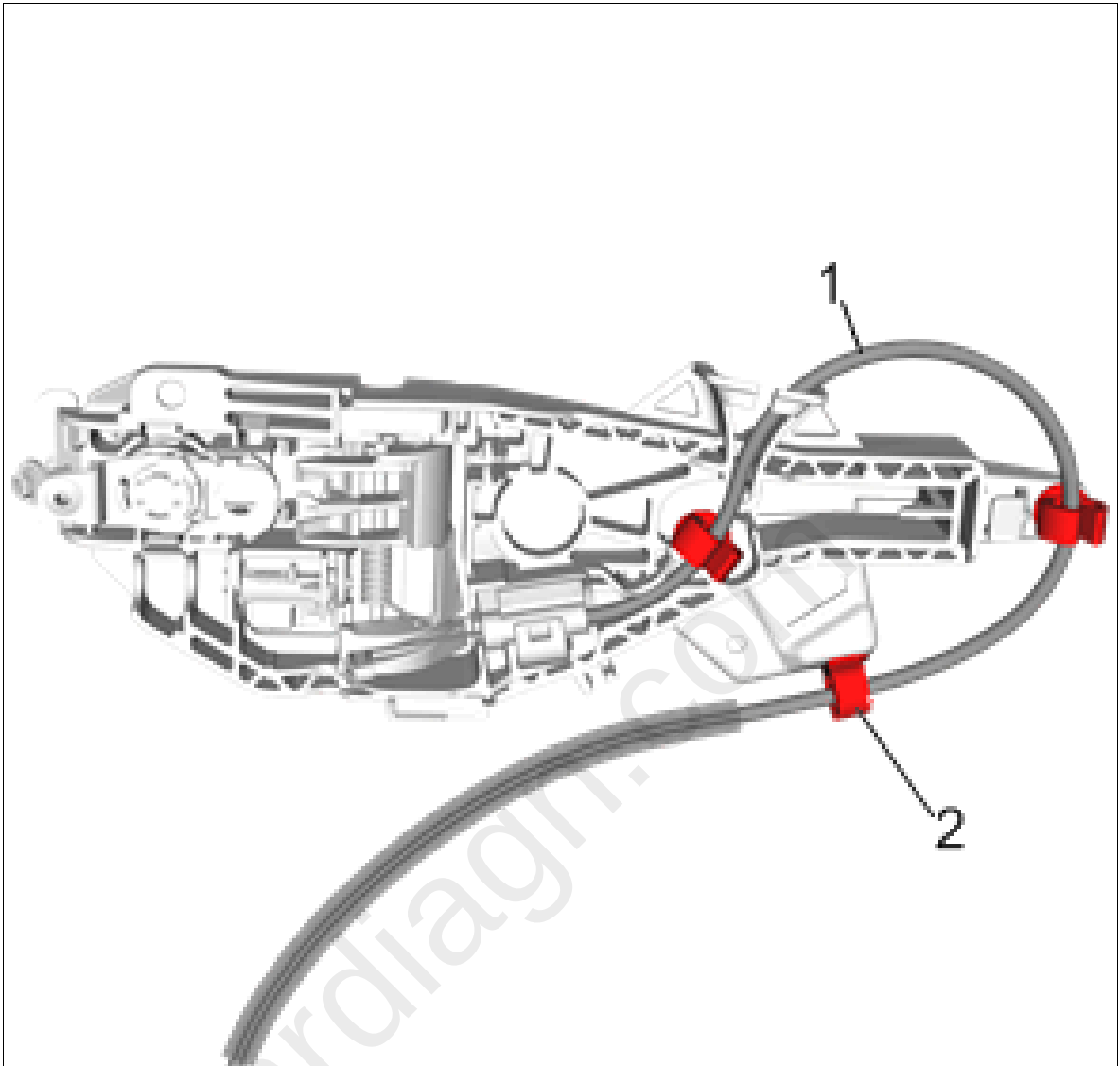
Fig 3: Lower Front Side Door Outside Handle Bracket



Courtesy of GENERAL MOTORS COMPANY

5. Lower front side door outside handle bracket (1) to the inside door opening.

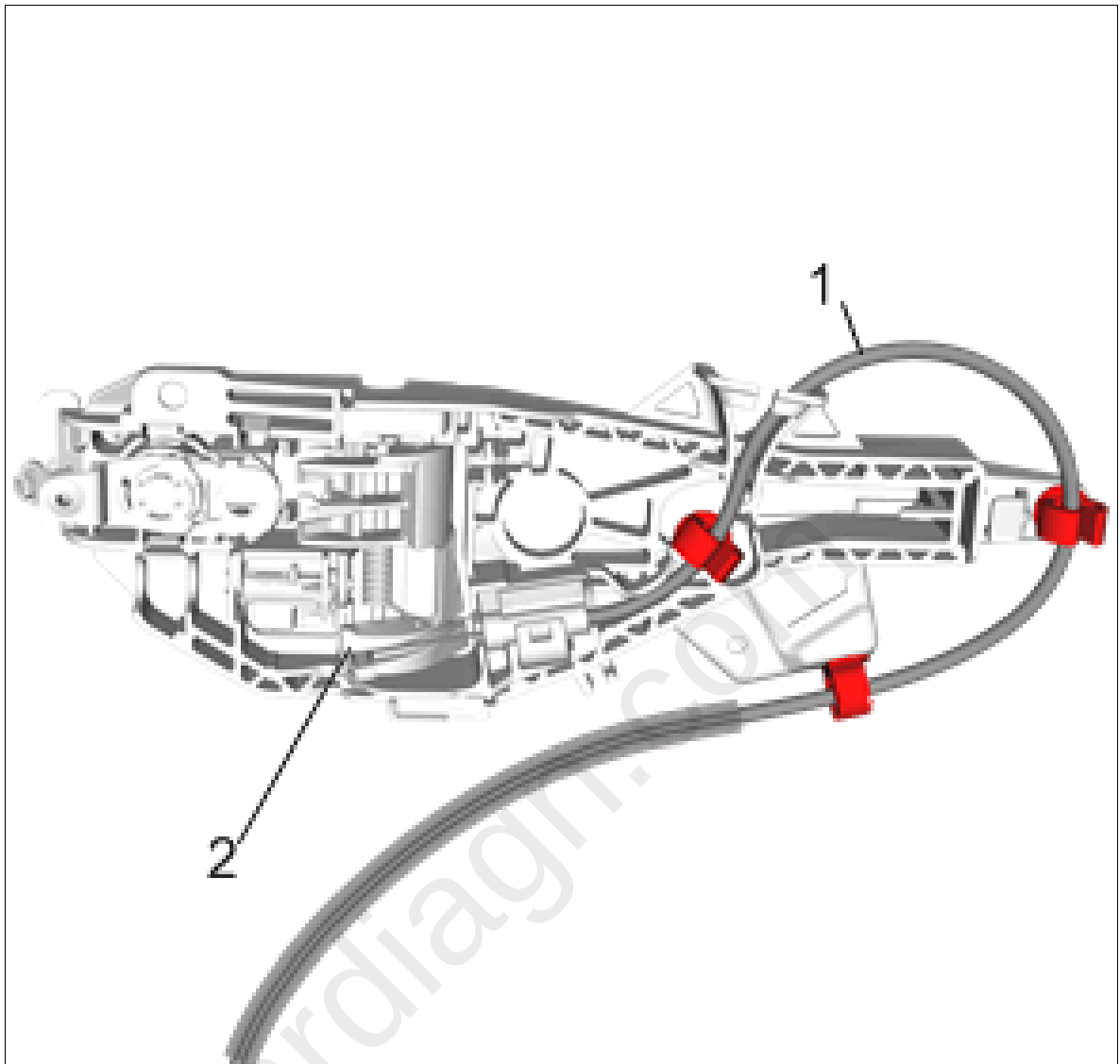
Fig 4: Front Side Door Outside Cable And Retainers



Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Side Door Outside Cable (1) at Retainers (2).

Fig 5: Front Side Door Outside Handle Bracket Cable At Counter Balance



Courtesy of GENERAL MOTORS COMPANY

7. Remove Front Side Door Outside Handle Bracket Cable (1) at Counter Balance (2).

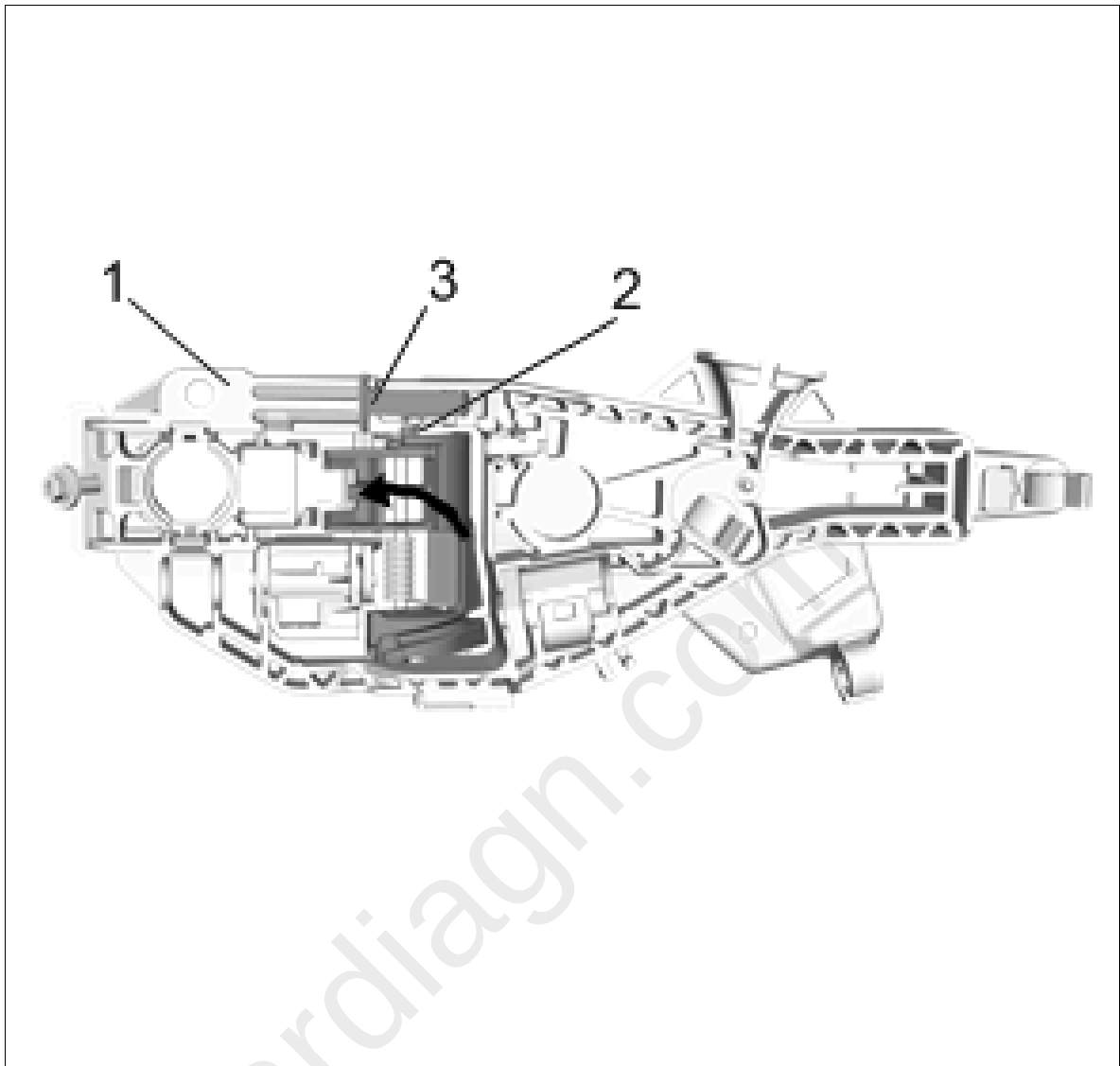
 NOTE:

It may be necessary to transfer the wire harness retainers from the old handle bracket.

8. Transfer components as necessary.

**REPAIR INSTRUCTIONS > FRONT SIDE DOOR OUTSIDE HANDLE BRACKET
REPLACEMENT > INSTALLATION PROCEDURE**

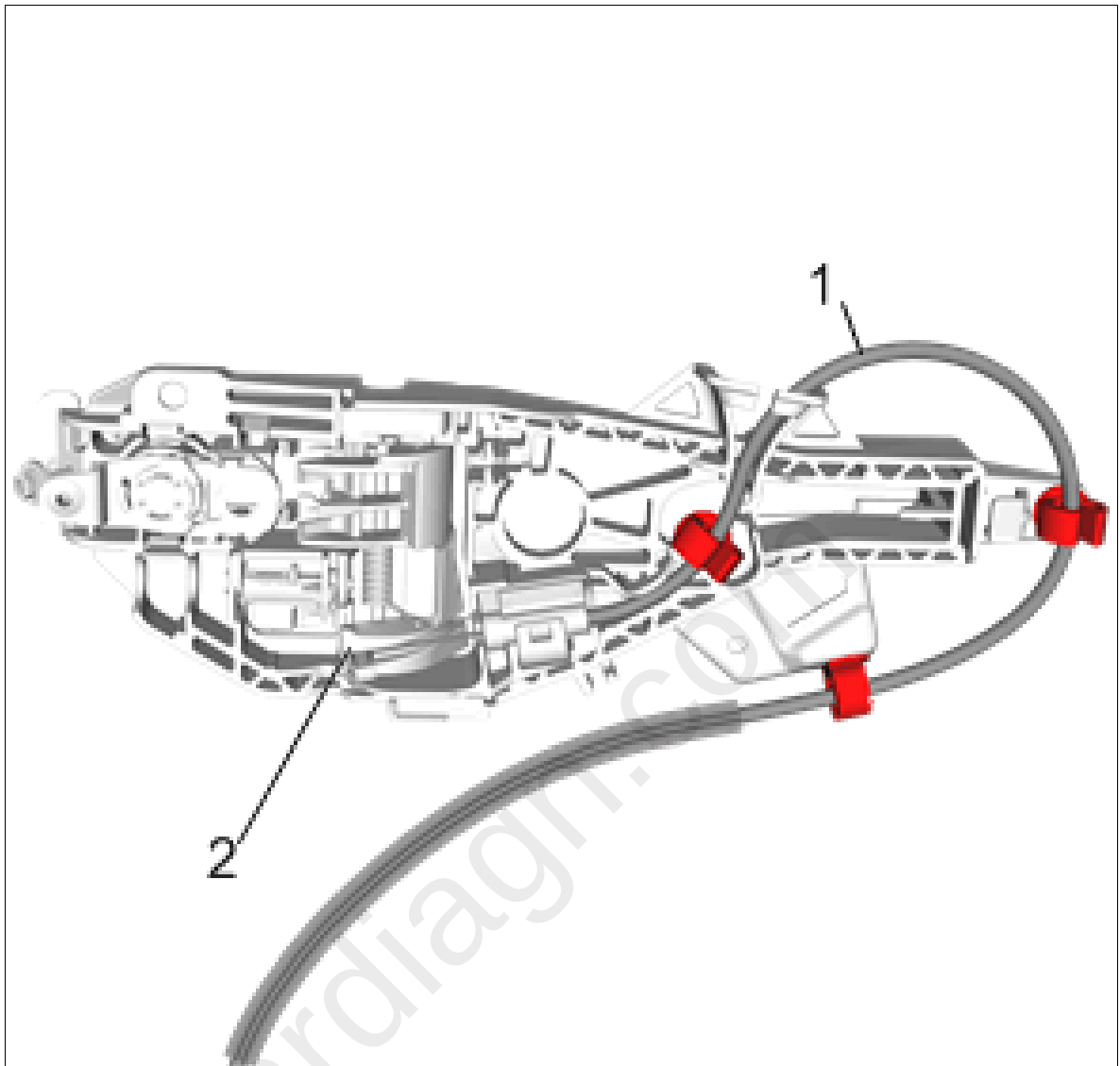
Fig 1: Front Side Door Outside Handle Bracket, Counter Balance, Bracket Clip



Courtesy of GENERAL MOTORS COMPANY

1. Reset the front side door outside handle bracket counter balance as follows:
 1. The outside door handle Can Not be installed until the counter balance is reset.
 2. Grasp the front side door outside handle bracket (1) with one hand.
 3. From the back side of the counter balance (2) push forward on the counter balance until it can be held in place using the bracket clip (3).

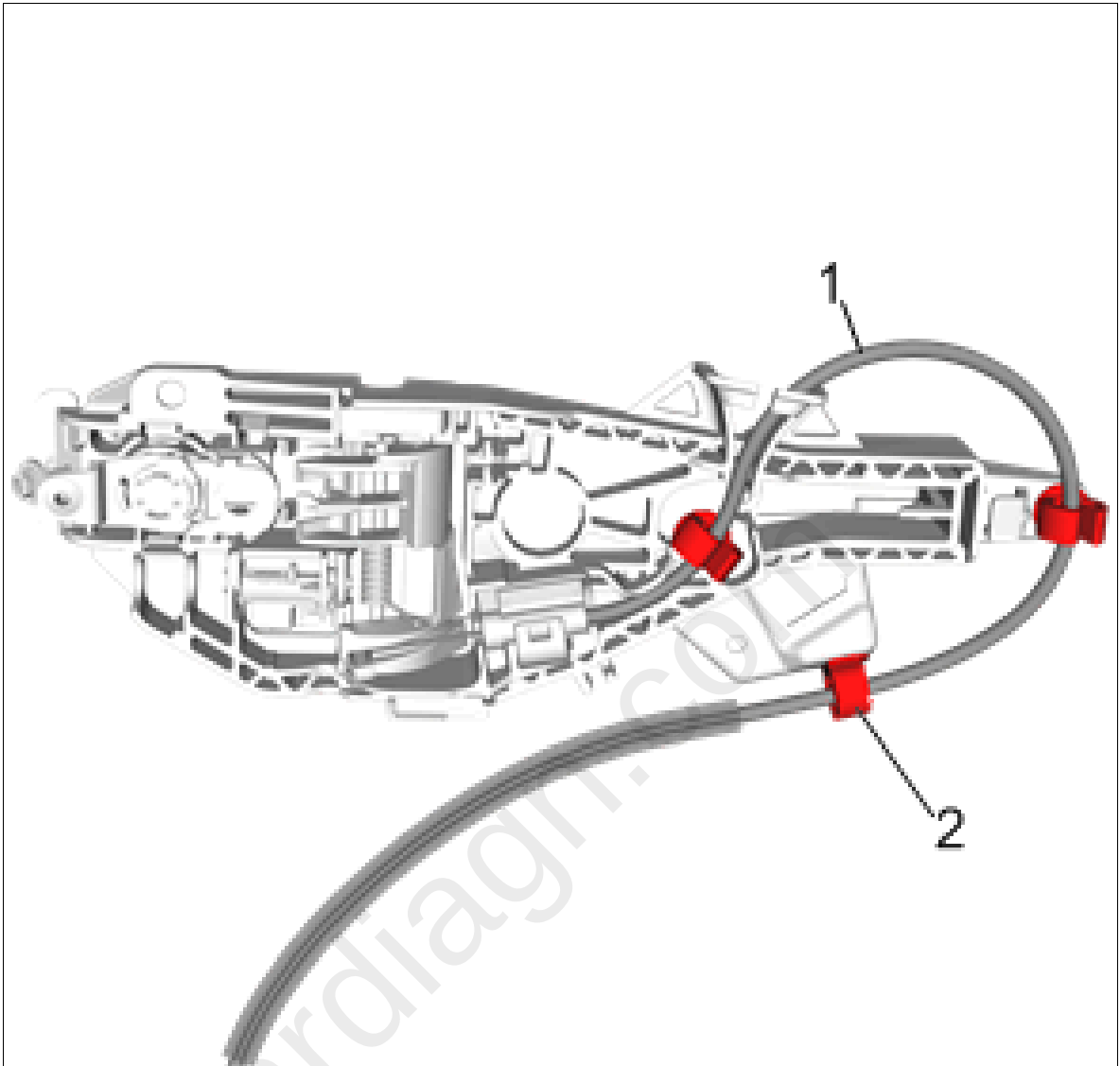
Fig 2: Front Side Door Outside Handle Bracket Cable At Counter Balance



Courtesy of GENERAL MOTORS COMPANY

2. Install Front Side Door Outside Handle Bracket Cable (1) at Counter Balance (2).

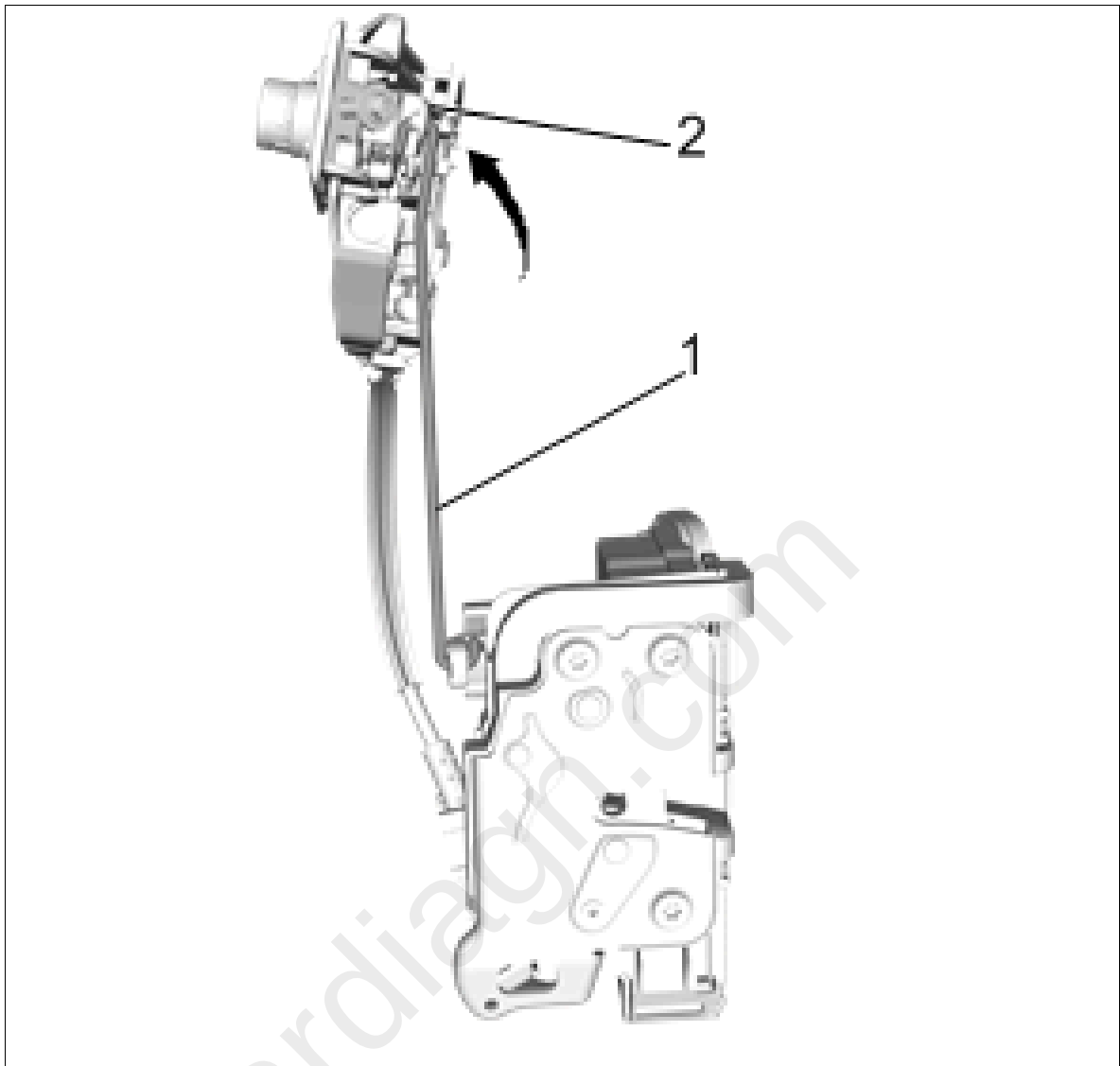
Fig 3: Front Side Door Outside Cable And Retainers



Courtesy of GENERAL MOTORS COMPANY

3. Install Front Side Door Outside Cable (1) at Retainers (2).

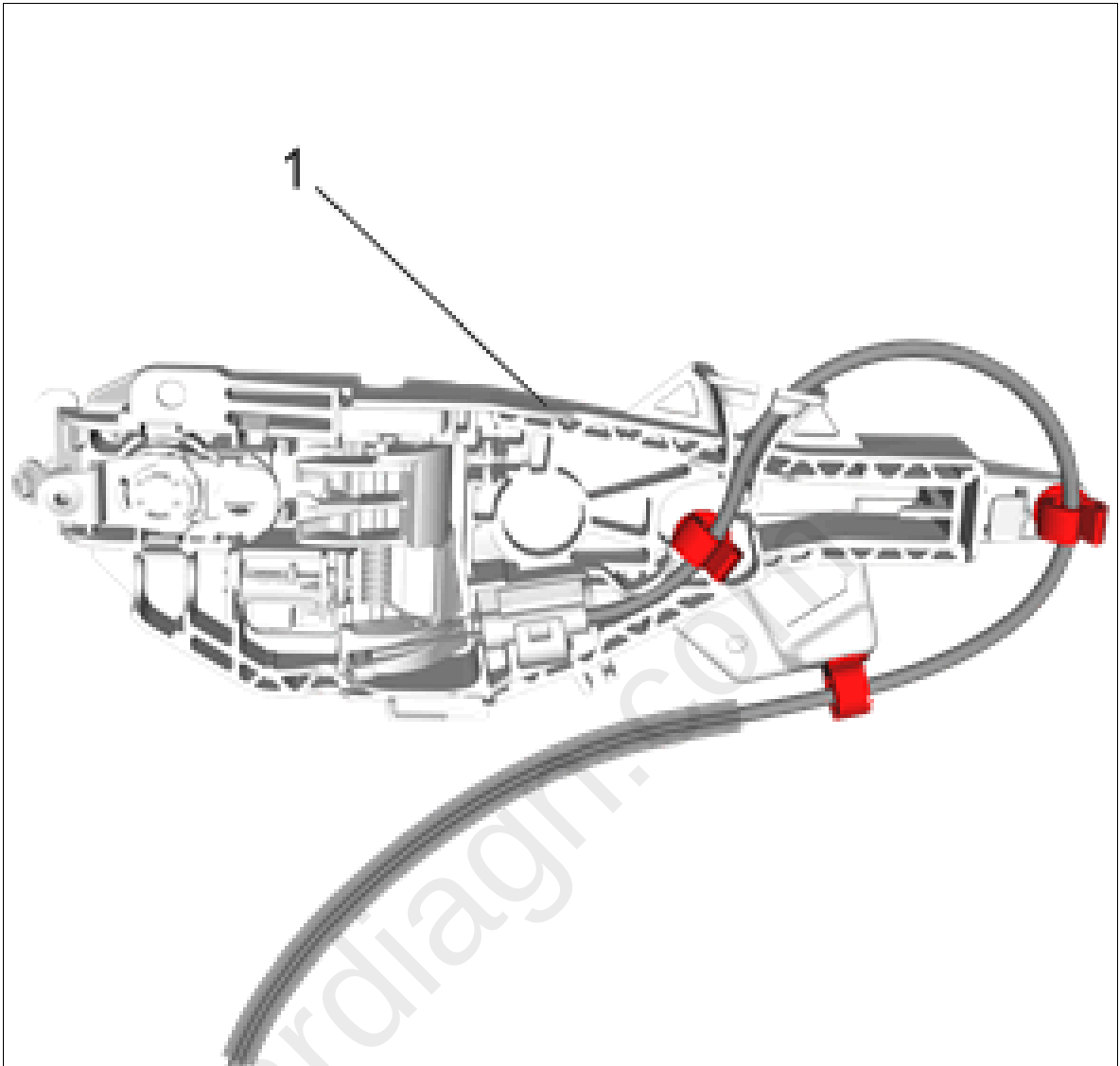
Fig 4: Front Side Door Lock Rod, Front Side Door Lock Cylinder



Courtesy of GENERAL MOTORS COMPANY

4. Install Front Side Door Lock Rod (1) at Front Side Door Lock Cylinder (2).

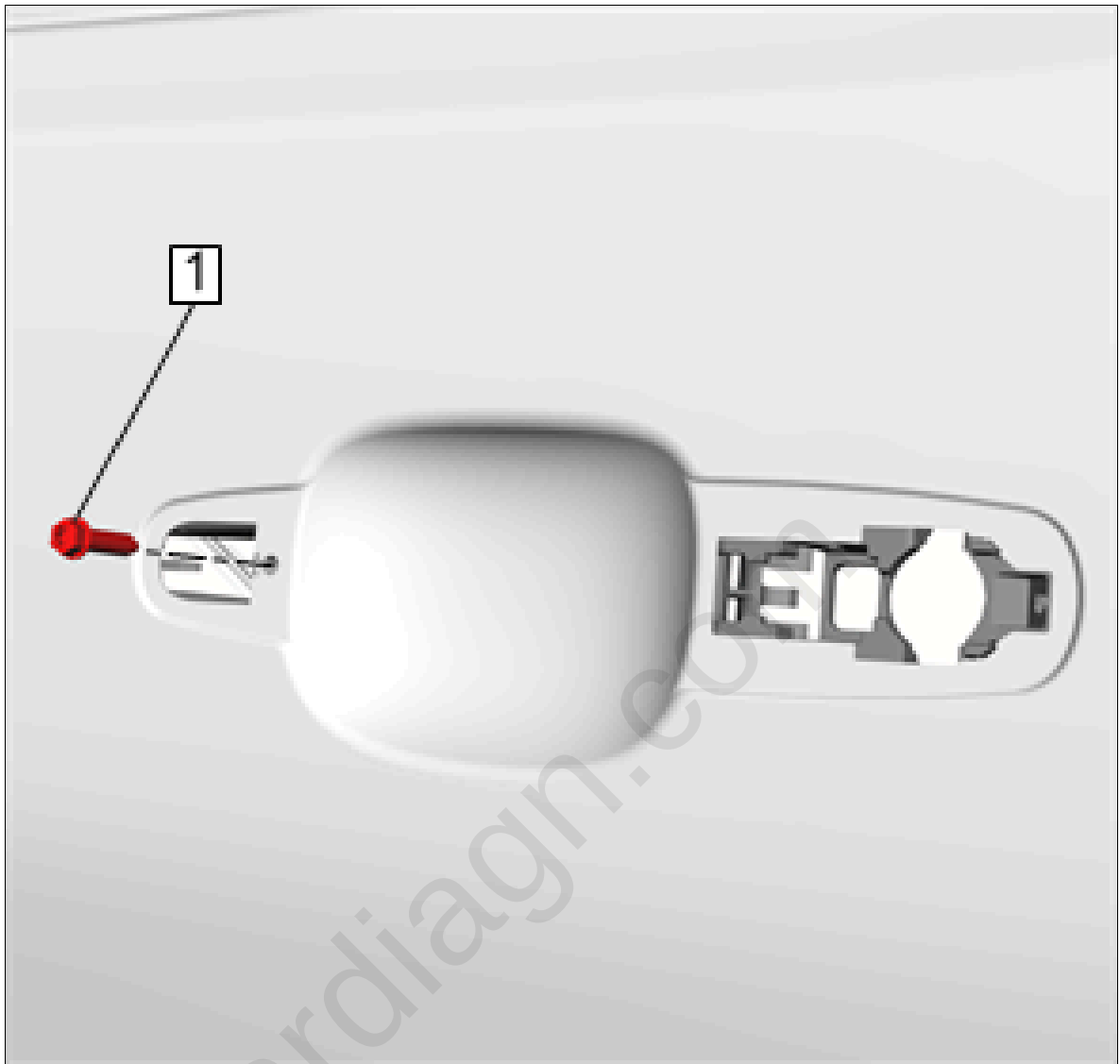
Fig 5: Front Side Door Outside Handle Bracket



Courtesy of GENERAL MOTORS COMPANY

5. Raise front side door outside handle bracket (1) up to the outside door opening.

Fig 6: Front Side Door Outside Handle Bracket Screw



Courtesy of GENERAL MOTORS COMPANY



CAUTION:

Refer to Fastener Caution .

6. Install Front Side Door Outside Handle Bracket Screw (1) and tighten to 5 N.m (44 lb in)



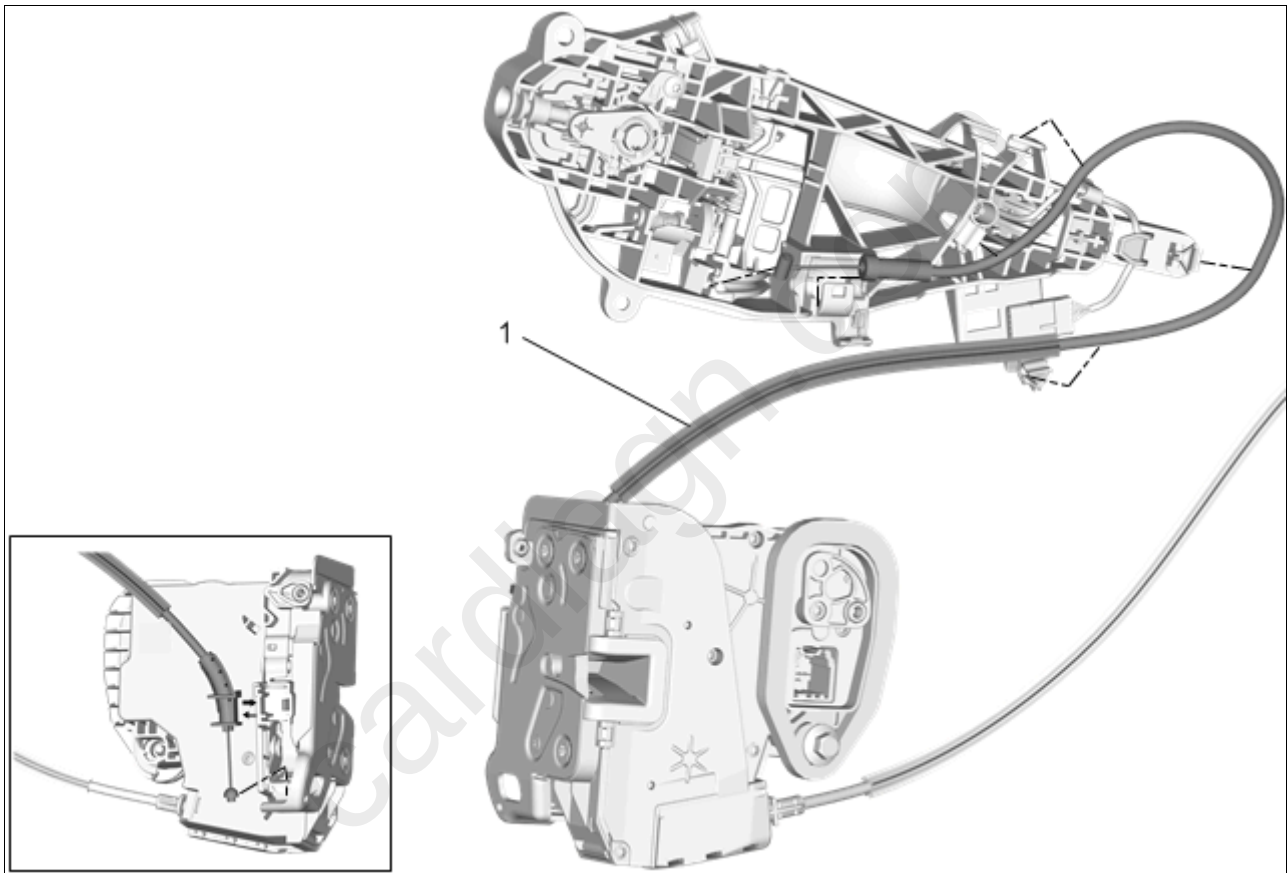
NOTE:

1. Ensure that the counter balance is reset and locked in the detent of the handle bracket. The counter balance Can Not be reset after the handle bracket has been reinstalled in the door.
2. Bracket should be slid full rearward prior to tightening bracket screw.

- 7.
8. Install Front Side Door Latch Replacement .
9. Install Front Side Door Outside Handle Replacement .
10. Ensure the door system operates properly.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR OUTSIDE HANDLE CABLE REPLACEMENT

Fig 1: Front Side Door Outside Handle Cable



Courtesy of GENERAL MOTORS COMPANY

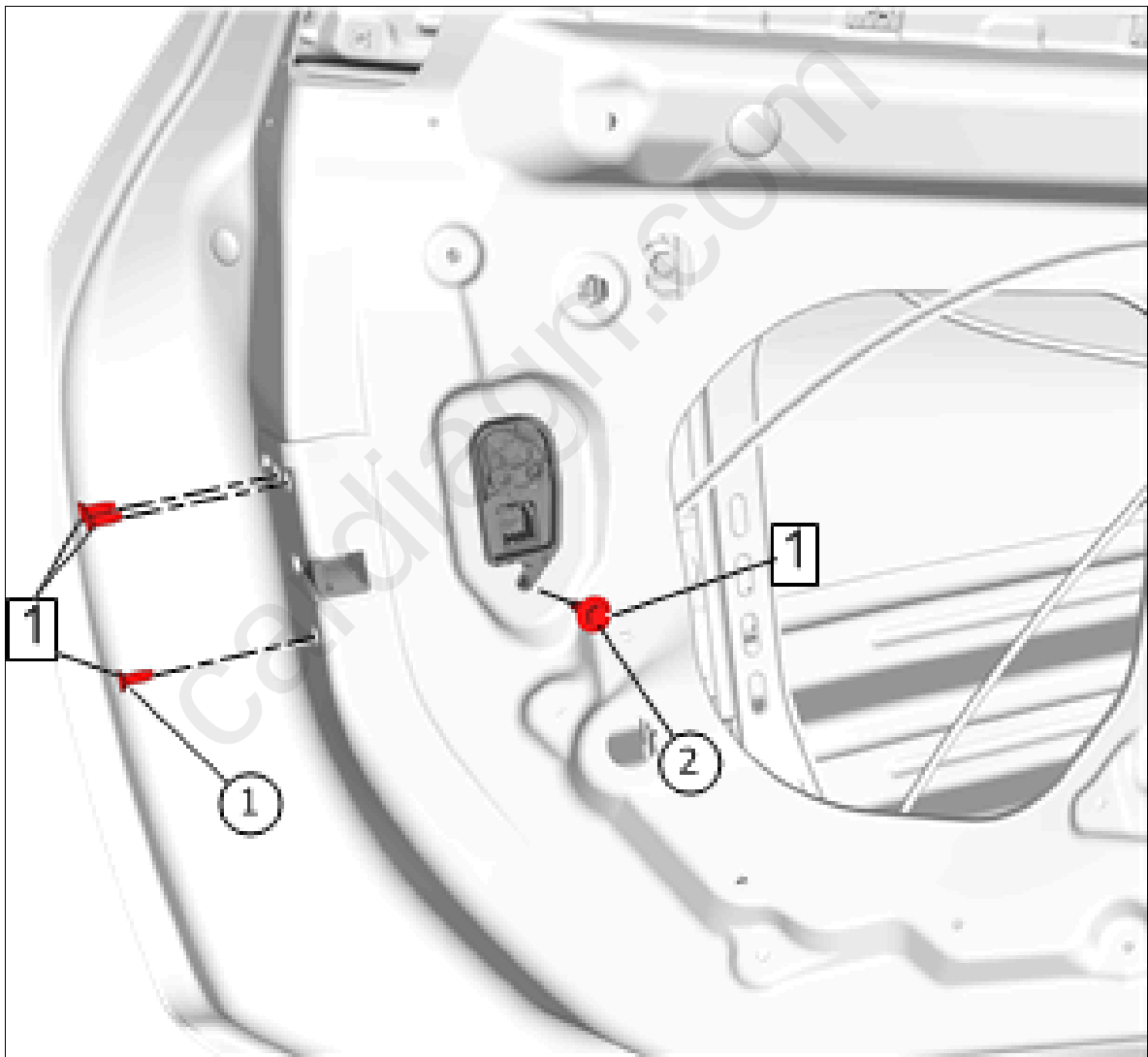
Callout	Component Name
Preliminary Procedure Front Side Door Latch Replacement	
1	Front Side Door Outside Handle Cable Procedure 1. Remove the front side door outside handle cable from the handle retainers. 2. Release the cable from the back of the latch assembly.

3. Remove the front side door outside handle cable from the front side door outside handle bracket.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LATCH REPLACEMENT > REMOVAL PROCEDURE

1. Remove Front Side Door Window Regulator Replacement .
2. Remove Front Side Door Outside Handle Bracket Replacement .
3. Disconnect the electrical connector.

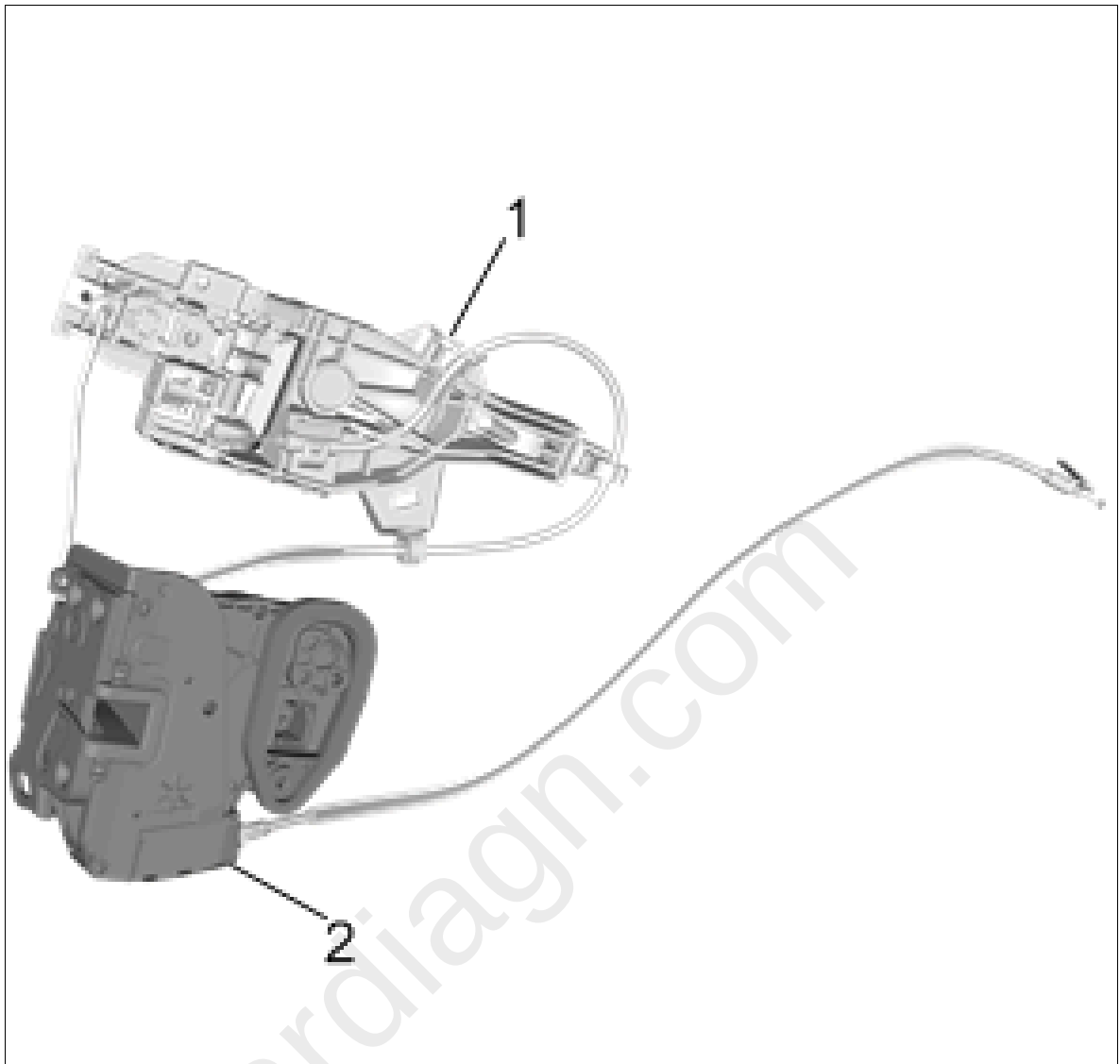
Fig 1: Front Side Door Latch Bolt



Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Side Door Latch Bolt (1) at Front Side Door Latch (Qty: 4)

Fig 2: Front Door Outside Handle Bracket And Front Side Door Latch



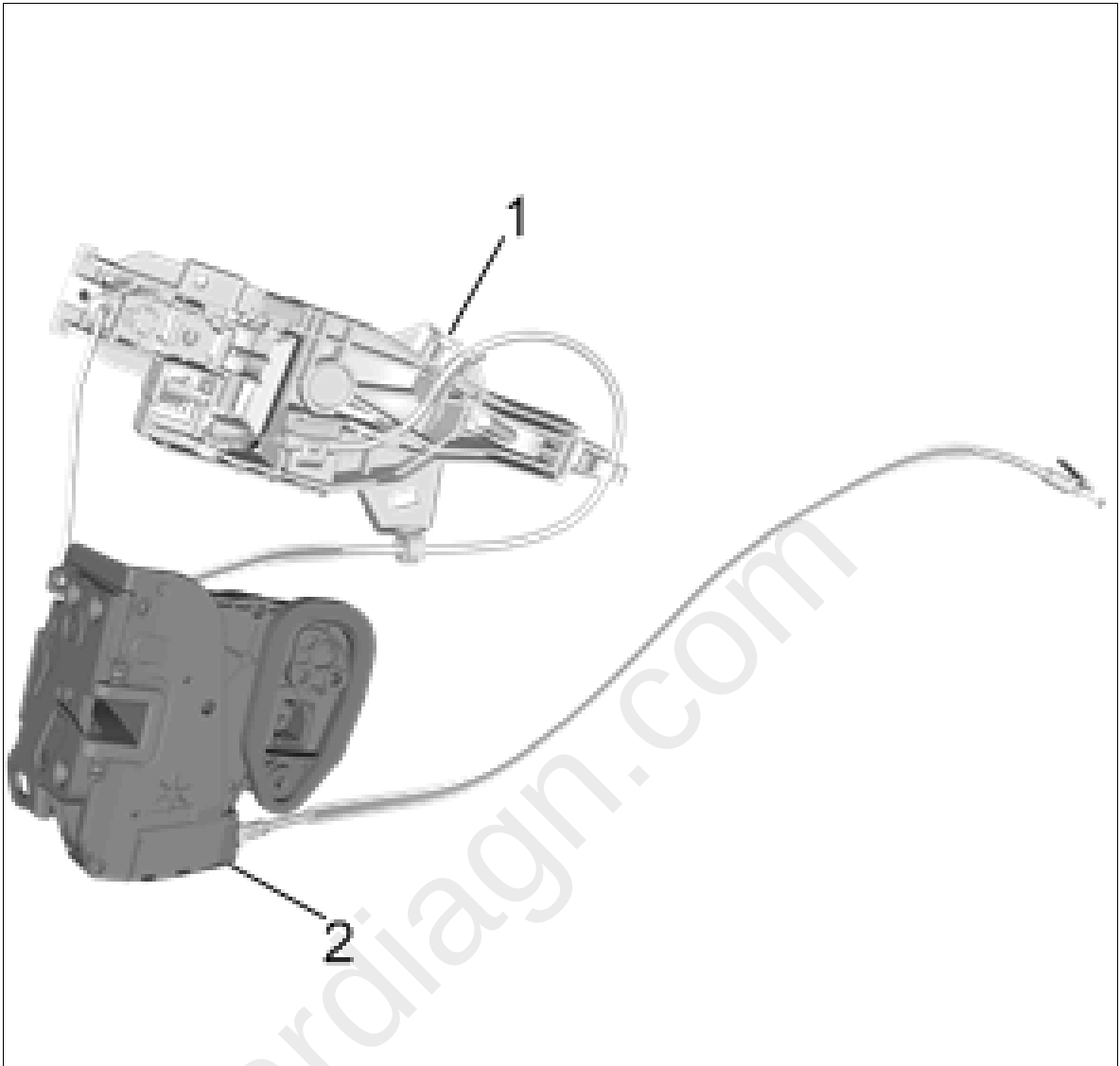
Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Door Outside Handle Bracket (1) at the Front Side Door Latch (2)
6. Remove Front Side Door Outside Handle Cable Replacement .
7. Remove Front Side Door Inside Handle Cable Replacement .

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LATCH REPLACEMENT > INSTALLATION PROCEDURE

1. Install Front Side Door Inside Handle Cable Replacement .
2. Install Front Side Door Outside Handle Cable Replacement .
3. Transfer components as necessary.

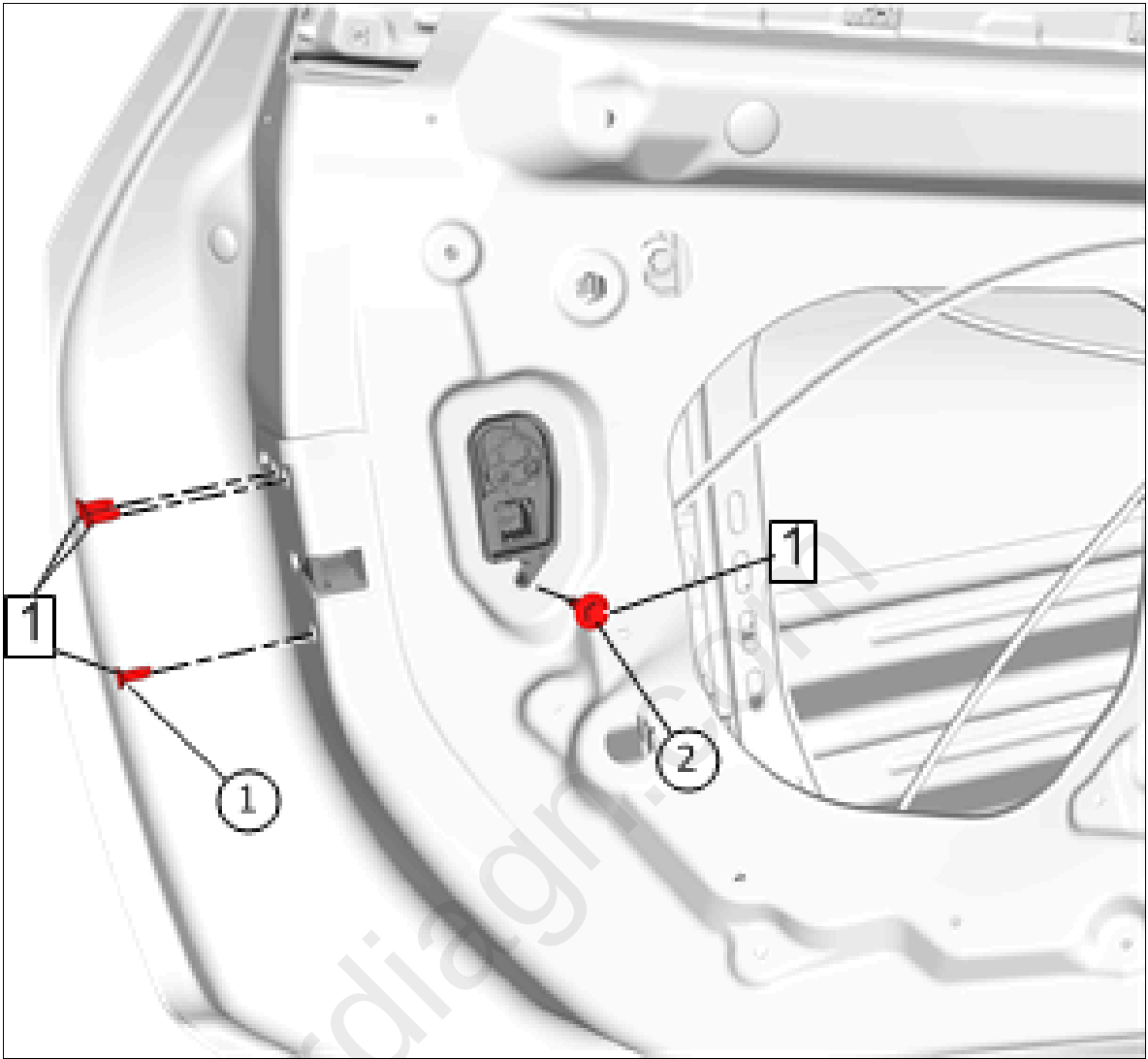
Fig 1: Door Outside Handle Bracket



Courtesy of GENERAL MOTORS COMPANY

4. Install Front Door Outside Handle Bracket (1) at the Front Side Door Latch (2).

Fig 2: Front Side Door Latch Bolt



Courtesy of GENERAL MOTORS COMPANY



CAUTION:

Refer to Fastener Caution



NOTE:

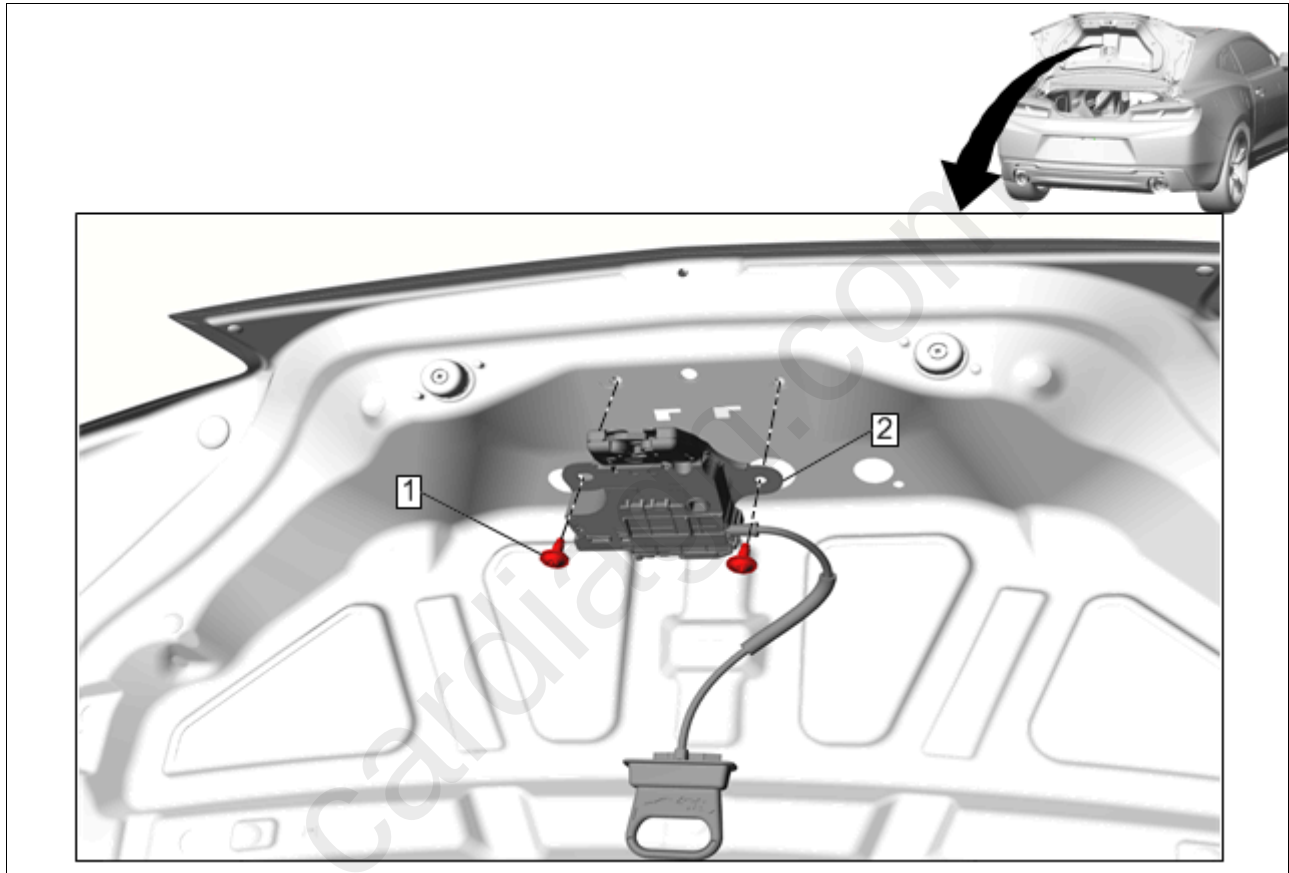
Install and torque the four latch bolts in proper sequence to prevent damage to the latch mechanism.

5. Install Front Side Door Latch Bolt (1) (Qty: 4) at Front Side Door Latch and tighten to 9 N.m (80 lb in)
6. Install Front Side Door Outside Handle Bracket Replacement .

7. Install Front Side Door Window Regulator Replacement .
8. Connect the electrical connector.
9. Inspect the door latch and outside handle for proper operation before installing the door trim.
10. Remove the tape from the front side door window and frame.

REPAIR INSTRUCTIONS > REAR COMPARTMENT LID LATCH REPLACEMENT

Fig 1: Rear Compartment Lid Latch



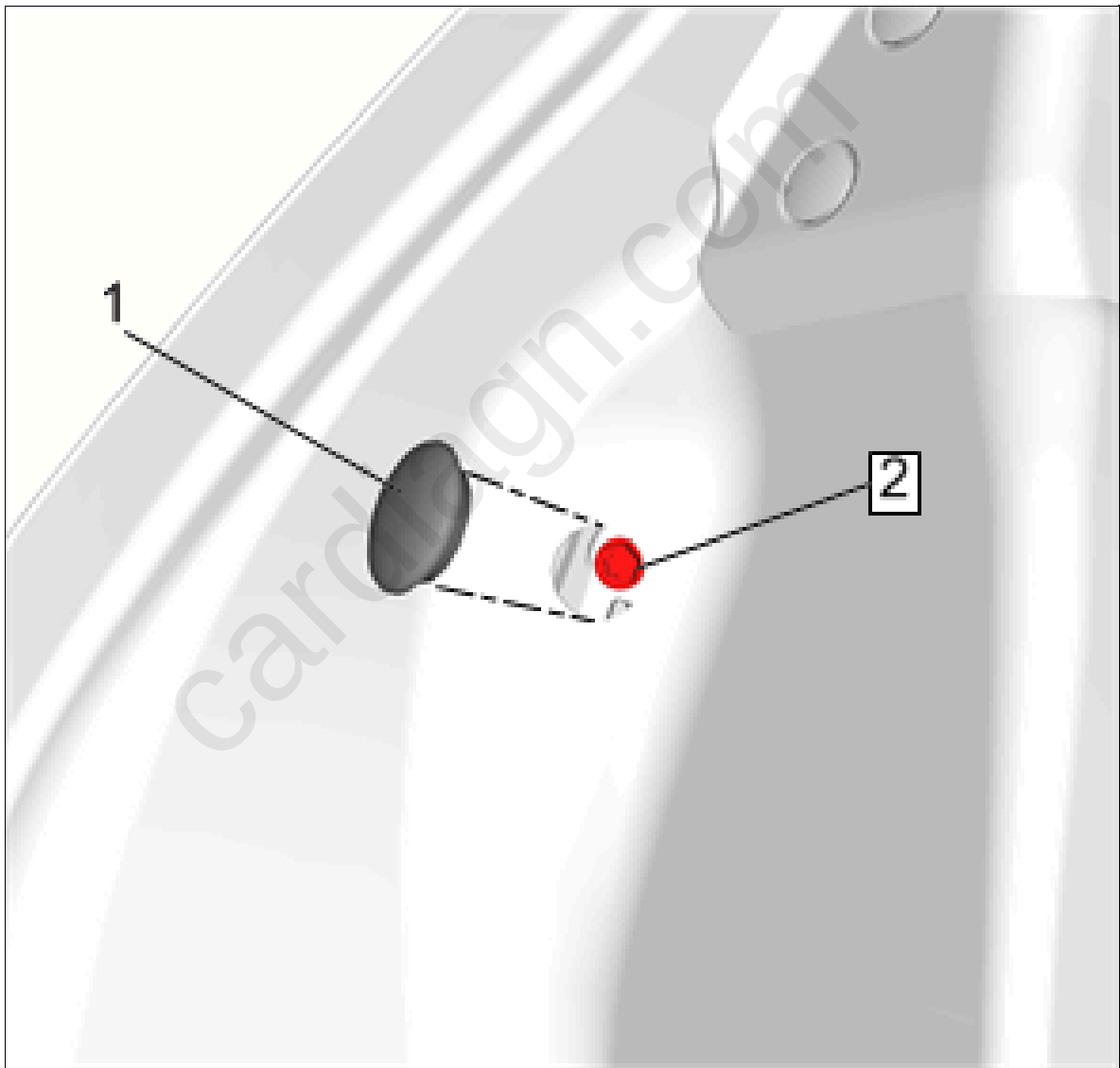
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure	
Rear Compartment Lid Latch Cover Replacement	
1	Rear Compartment Lid Latch Bolt (Qty: 2) CAUTION: Refer to Fastener Caution .

	Tighten 12 N.m (106 lb in)
2	Rear Compartment Lid Latch Procedure Disconnect the electrical connector.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK CYLINDER OPENING COVER REPLACEMENT > REMOVAL PROCEDURE

Fig 1: Front Side Door Access Hole Cover



Courtesy of GENERAL MOTORS COMPANY

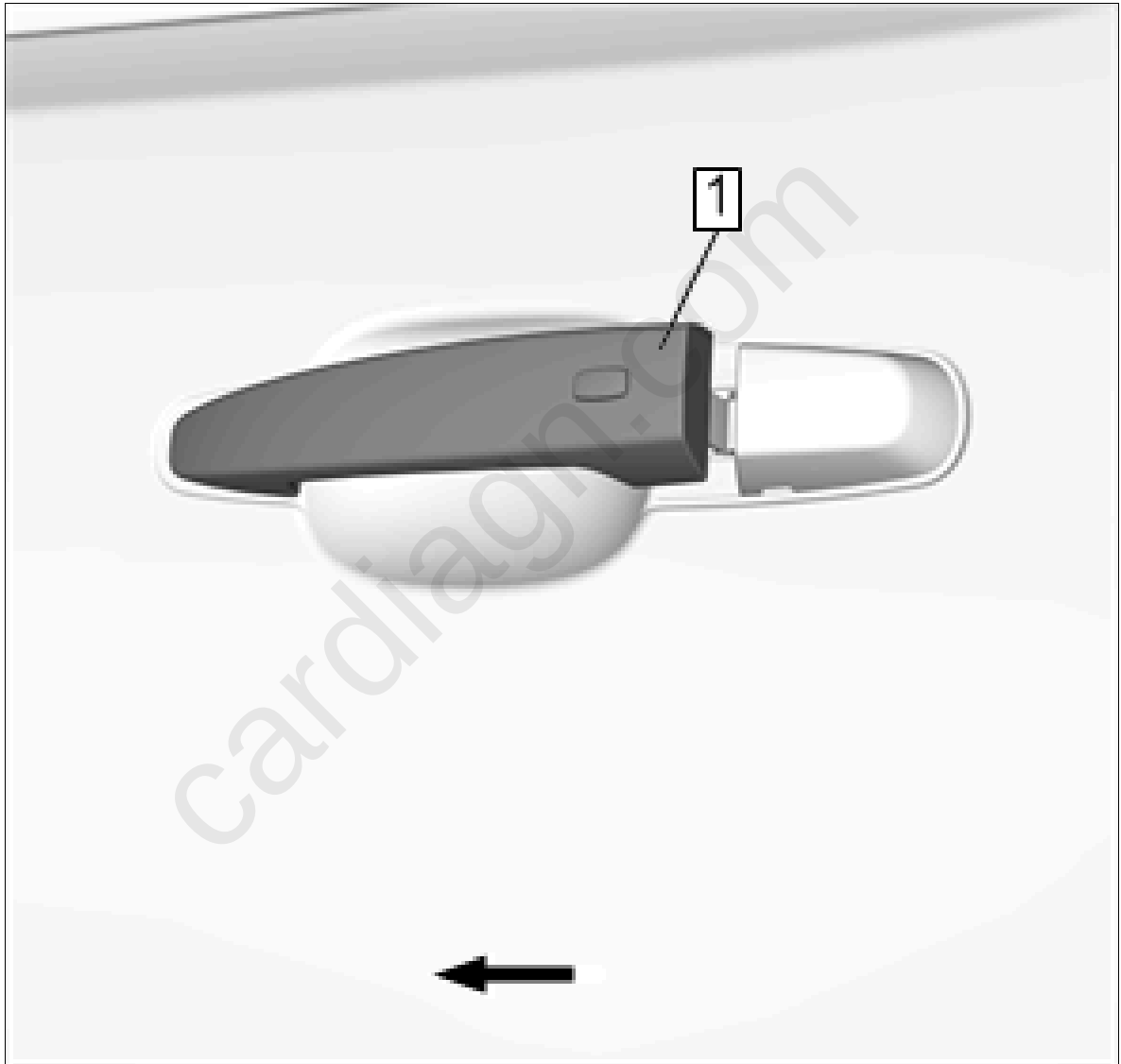
1. Remove Front Side Door Access Hole Cover (1).

 NOTE:

1. *USE HAND TOOL ONLY. Using a battery operated gun or power tool can BREAK the component.*
2. *Around 7 rotations is enough to allow the Front Side Door Outside Handle Lock Cylinder to be removed.*

2. Loosen Front Side Door Outside Handle Lock Cylinder Screw (2).

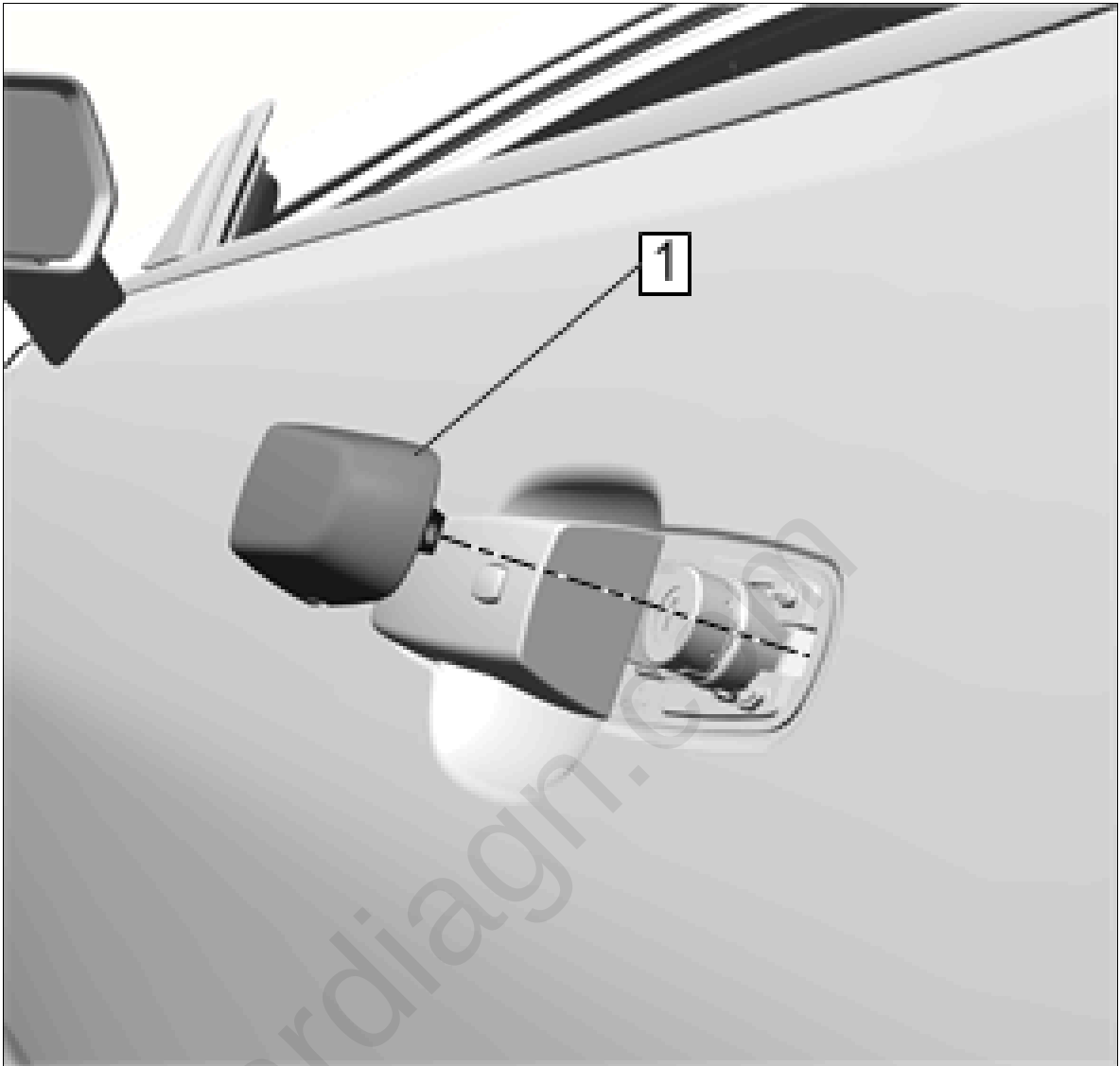
Fig 2: Door Handle



Courtesy of GENERAL MOTORS COMPANY

3. Pull the door handle (1) out to the open position.

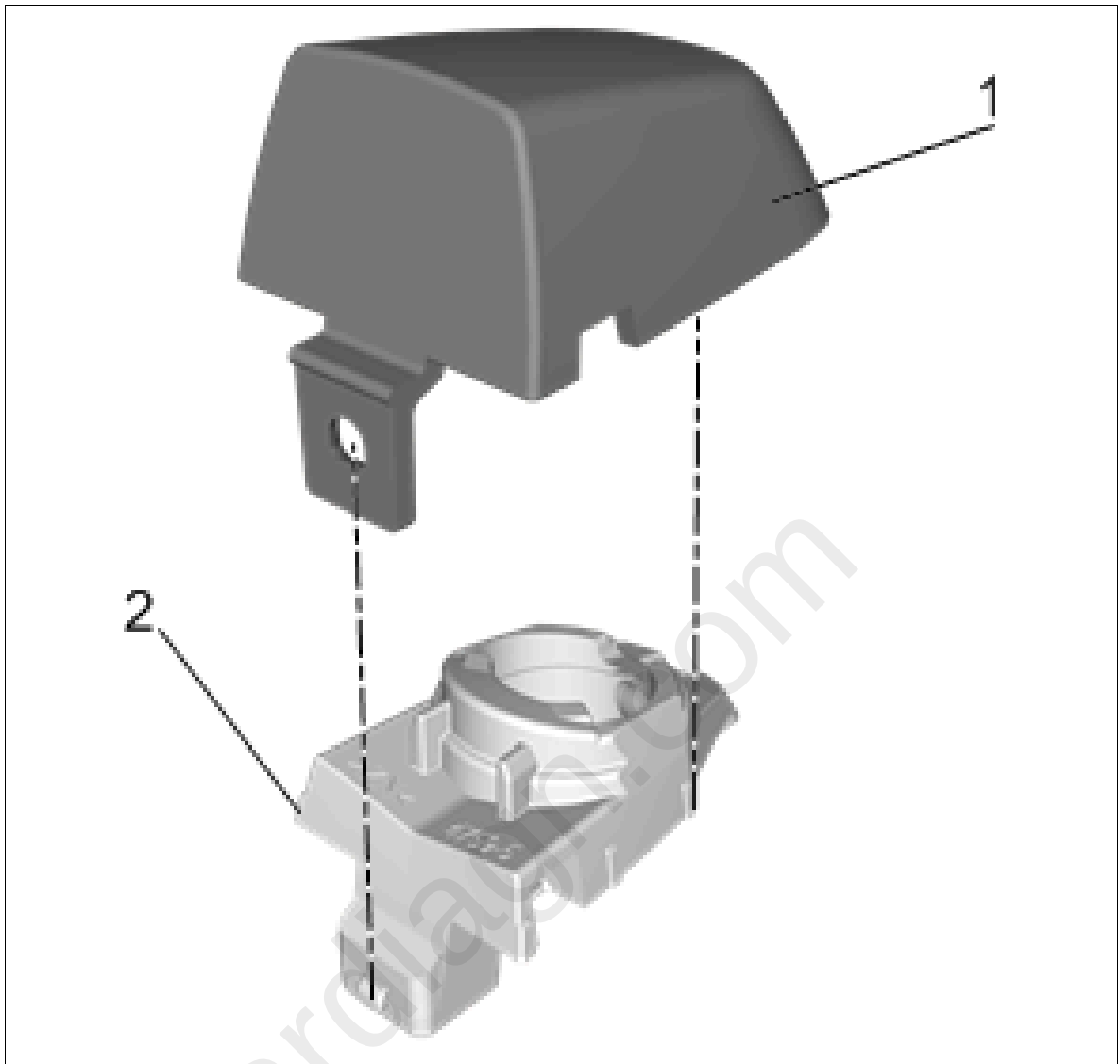
Fig 3: Front Side Door Lock Cylinder Opening Cover



Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Side Door Lock Cylinder Opening Cover (1).

Fig 4: Lock Cylinder Insulator And Cover

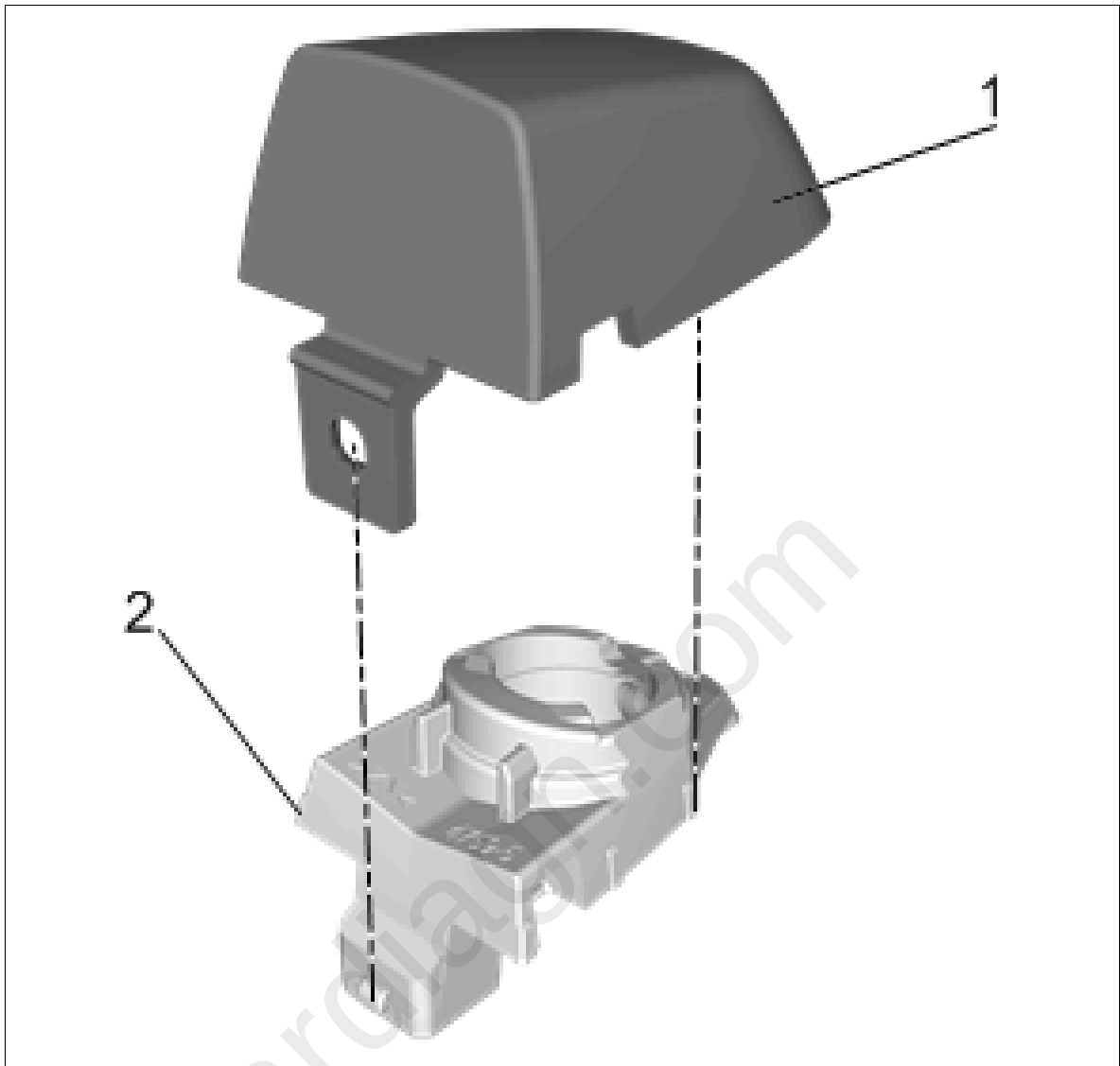


Courtesy of GENERAL MOTORS COMPANY

5. Using the appropriate tool, remove the cover (1) from the lock cylinder insulator (2).

**REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK CYLINDER OPENING COVER
REPLACEMENT > INSTALLATION PROCEDURE**

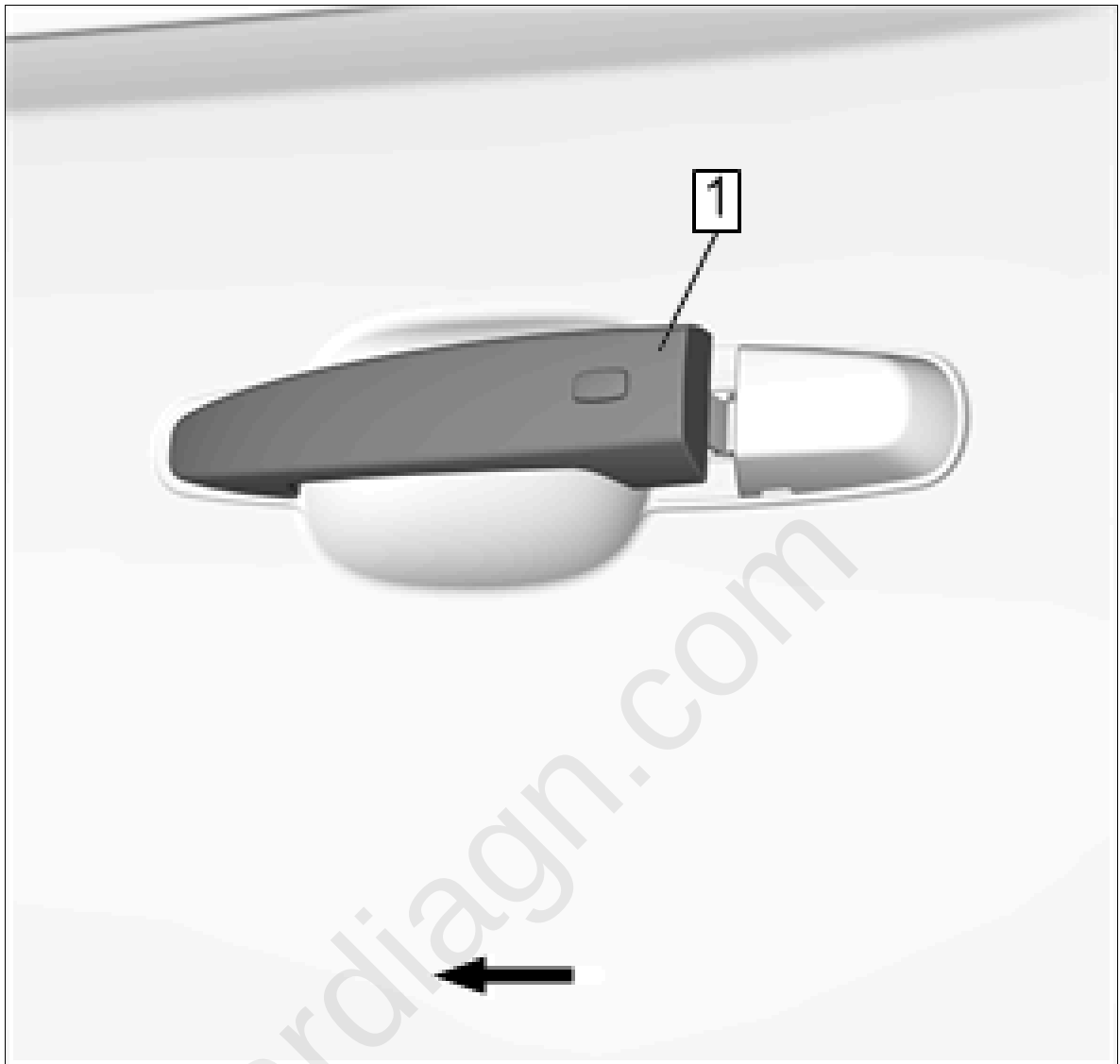
Fig 1: Lock Cylinder Insulator And Cover



Courtesy of GENERAL MOTORS COMPANY

1. Install the cover (1) to the lock cylinder insulator (2).

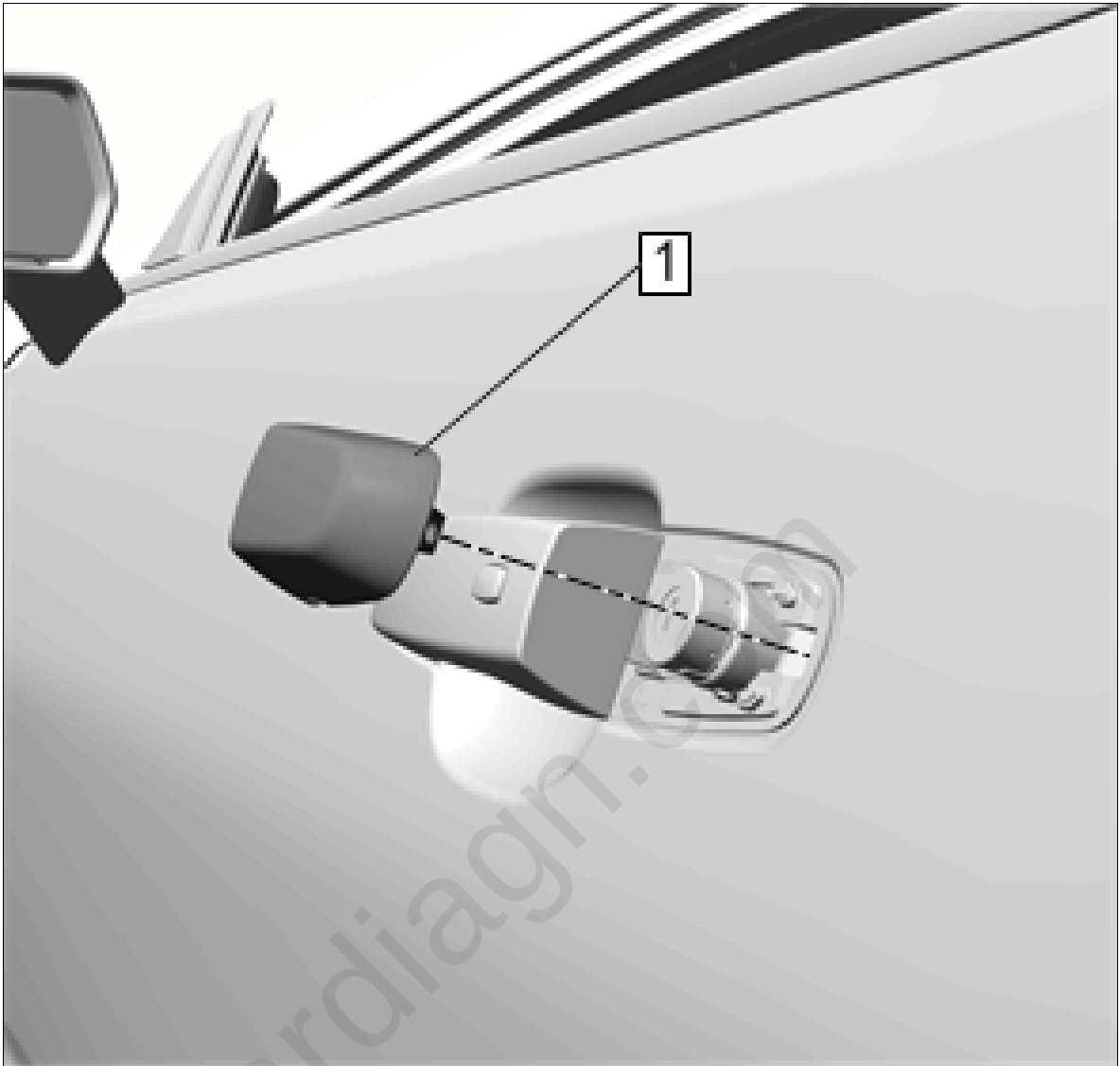
Fig 2: Door Handle



Courtesy of GENERAL MOTORS COMPANY

2. Pull the door handle (1) out to the open position.

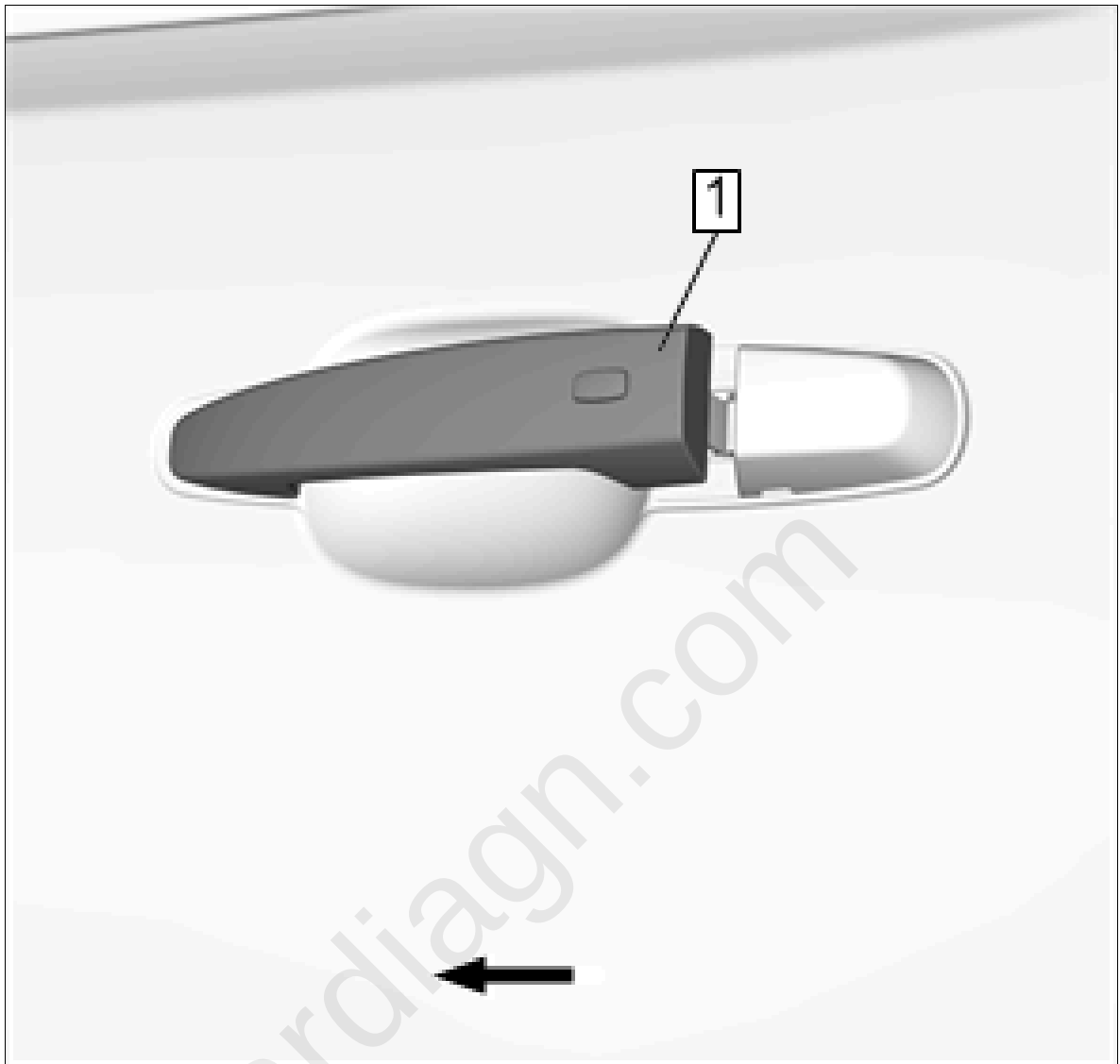
Fig 3: Front Side Door Lock Cylinder Opening Cover



Courtesy of GENERAL MOTORS COMPANY

3. Install Front Side Door Lock Cylinder Opening Cover (1).

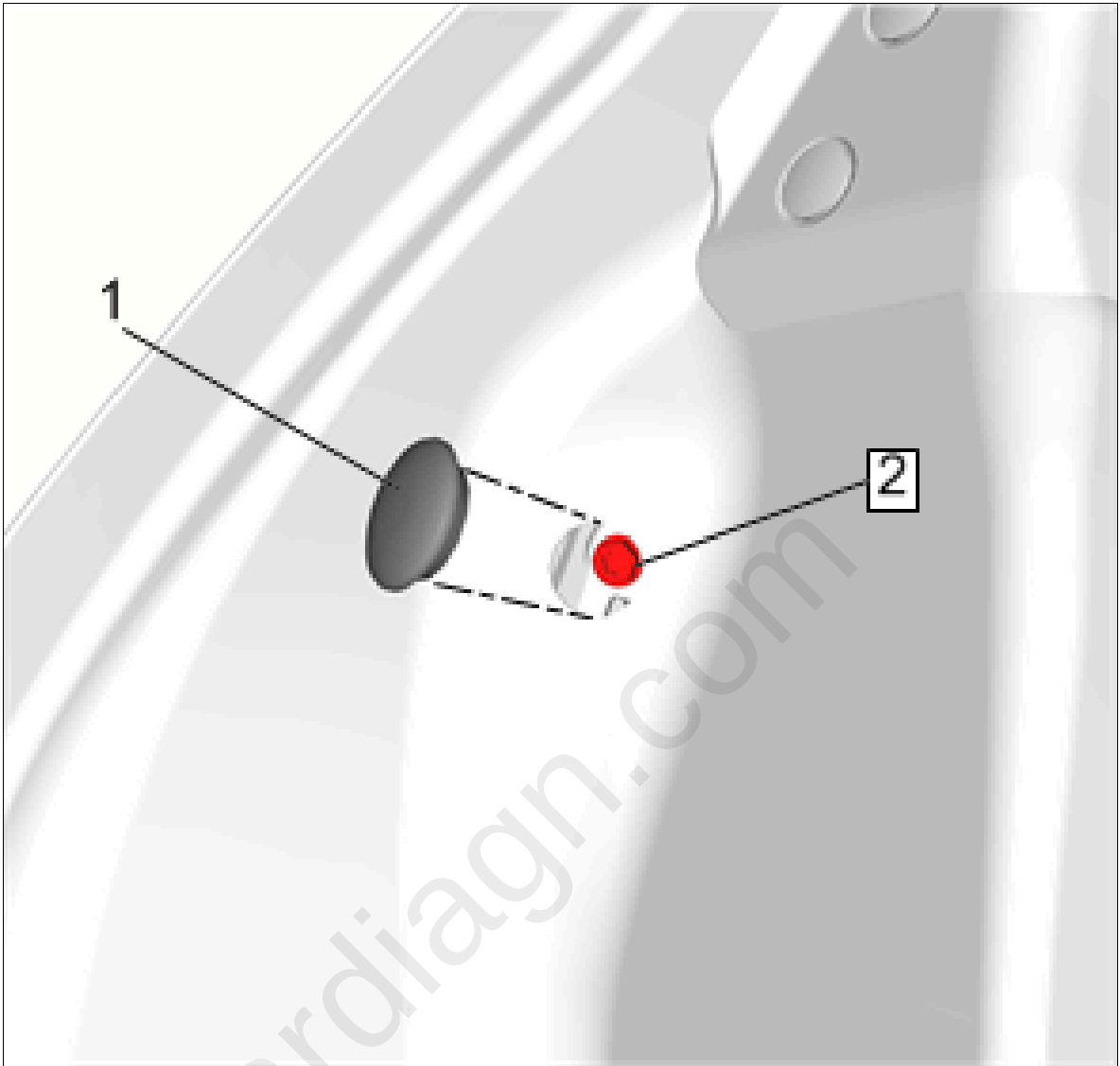
Fig 4: Front Side Door Outside Handle



Courtesy of GENERAL MOTORS COMPANY

4. Place the Front Side Door Outside Handle (1) in the closed position.

Fig 5: Front Side Door Outside Handle Lock Cylinder Screw

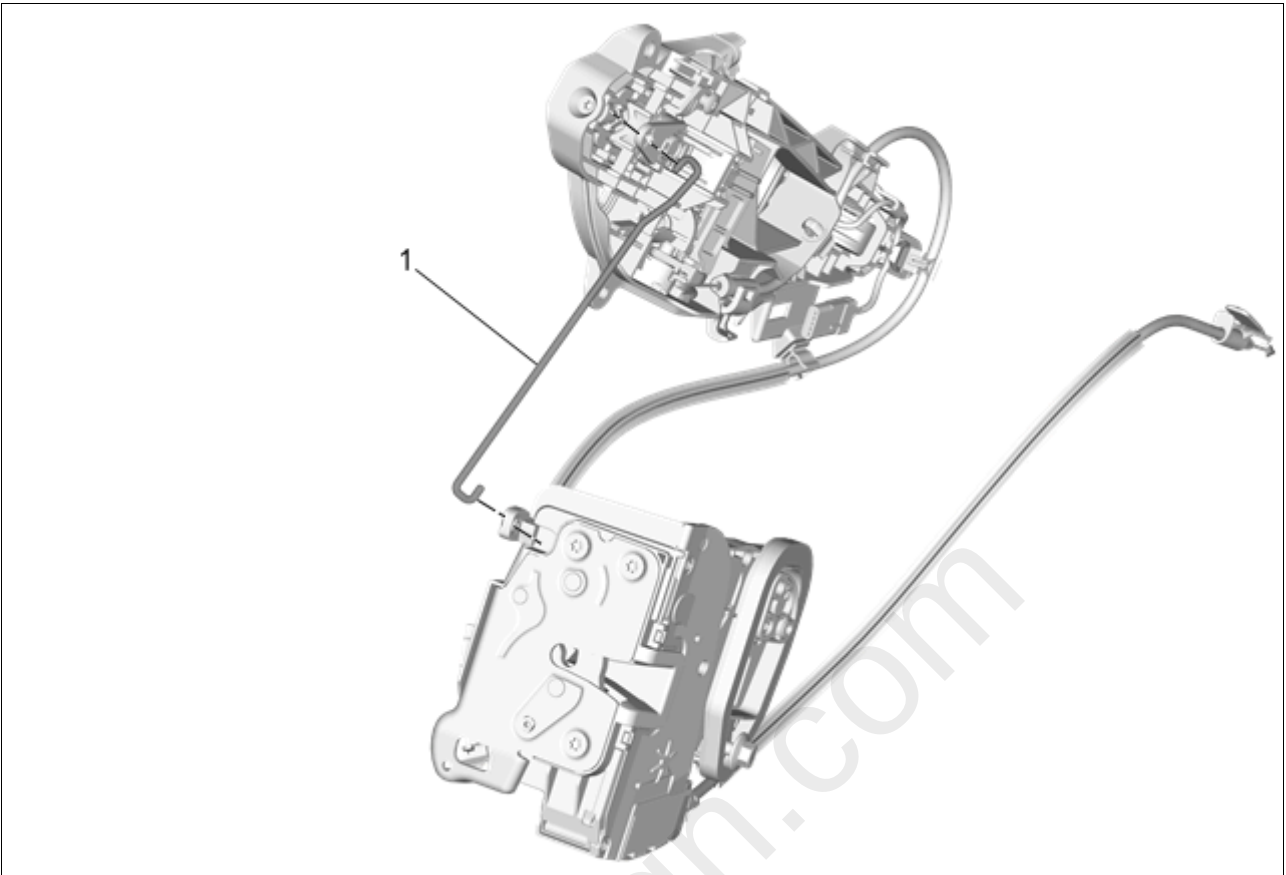


Courtesy of GENERAL MOTORS COMPANY

5. Tighten Front Side Door Outside Handle Lock Cylinder Screw (2) to 4 N.m (35 lb in)
6. Install Front Side Door Lock Cylinder Opening Cover (1).

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK CYLINDER ROD REPLACEMENT

Fig 1: Front Side Door Lock Cylinder Rod

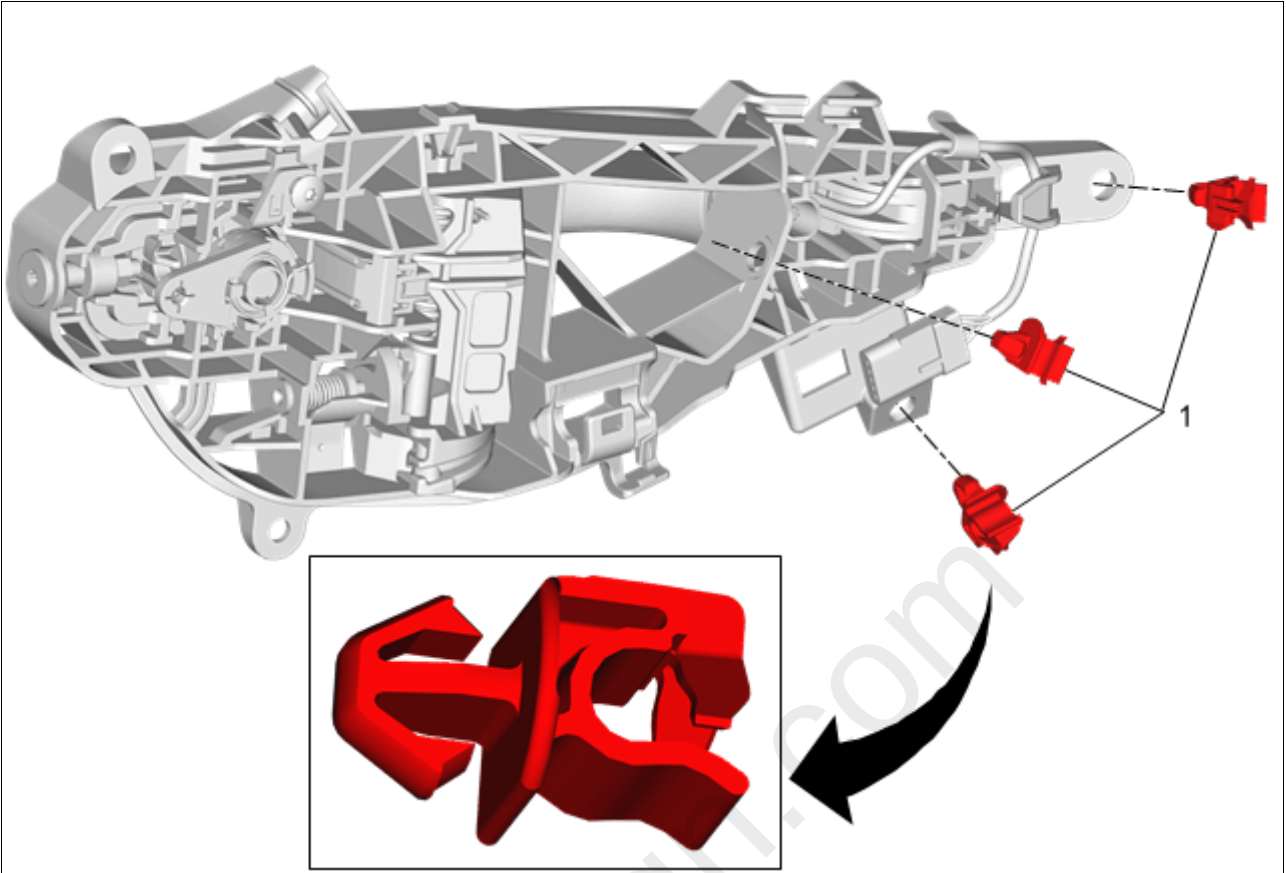


Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Side Door Latch Replacement	
1	Front Side Door Lock Cylinder Rod Procedure 1. Remove the front side door lock cylinder rod from the lock cylinder by turning the housing bracket clockwise. 2. Release the lock cylinder rod from the latch only.Do NOT remove the door handle cables from the latch.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR OUTSIDE HANDLE CABLE RETAINER REPLACEMENT

Fig 1: Front Side Door Outside Handle Cable Retainer

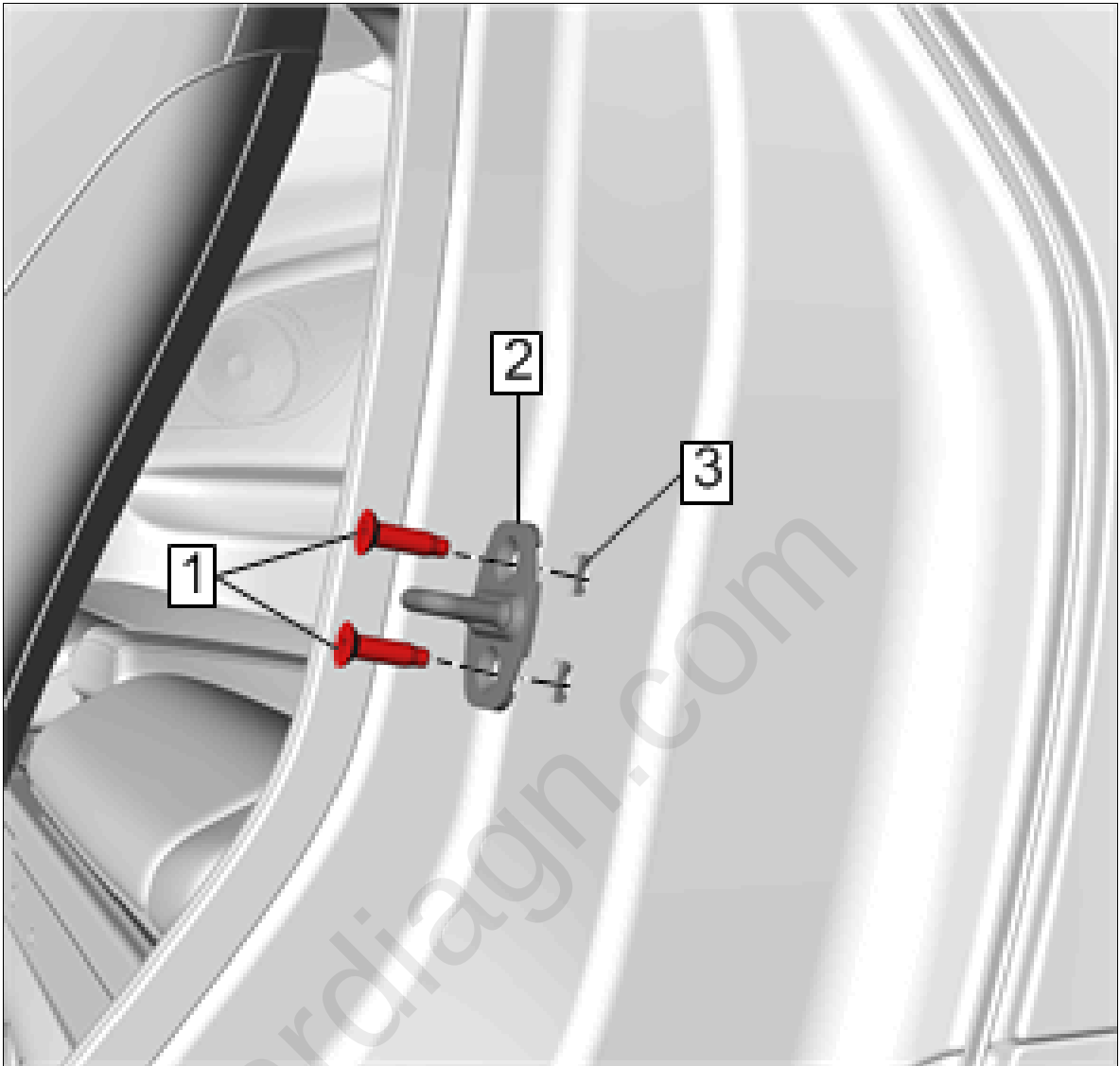


Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Side Door Outside Handle Bracket Replacement	
1	Front Side Door Outside Handle Cable Retainer (Qty: 3) Procedure Squeeze tab end of retainer and pull retainer from handle bracket.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK STRIKER ADJUSTMENT

Fig 1: Front Side Door Lock Striker



Courtesy of GENERAL MOTORS COMPANY

 NOTE:

To determine if the striker adjustment is required, proceed as follows.

1. Ensure that the door is properly aligned with the door opening before proceeding with the striker adjustment.
2. Open and close the door on the striker (2). 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 latch.

 NOTE:

When the striker screws (1) are removed, the striker anchor plate (3) will slip down

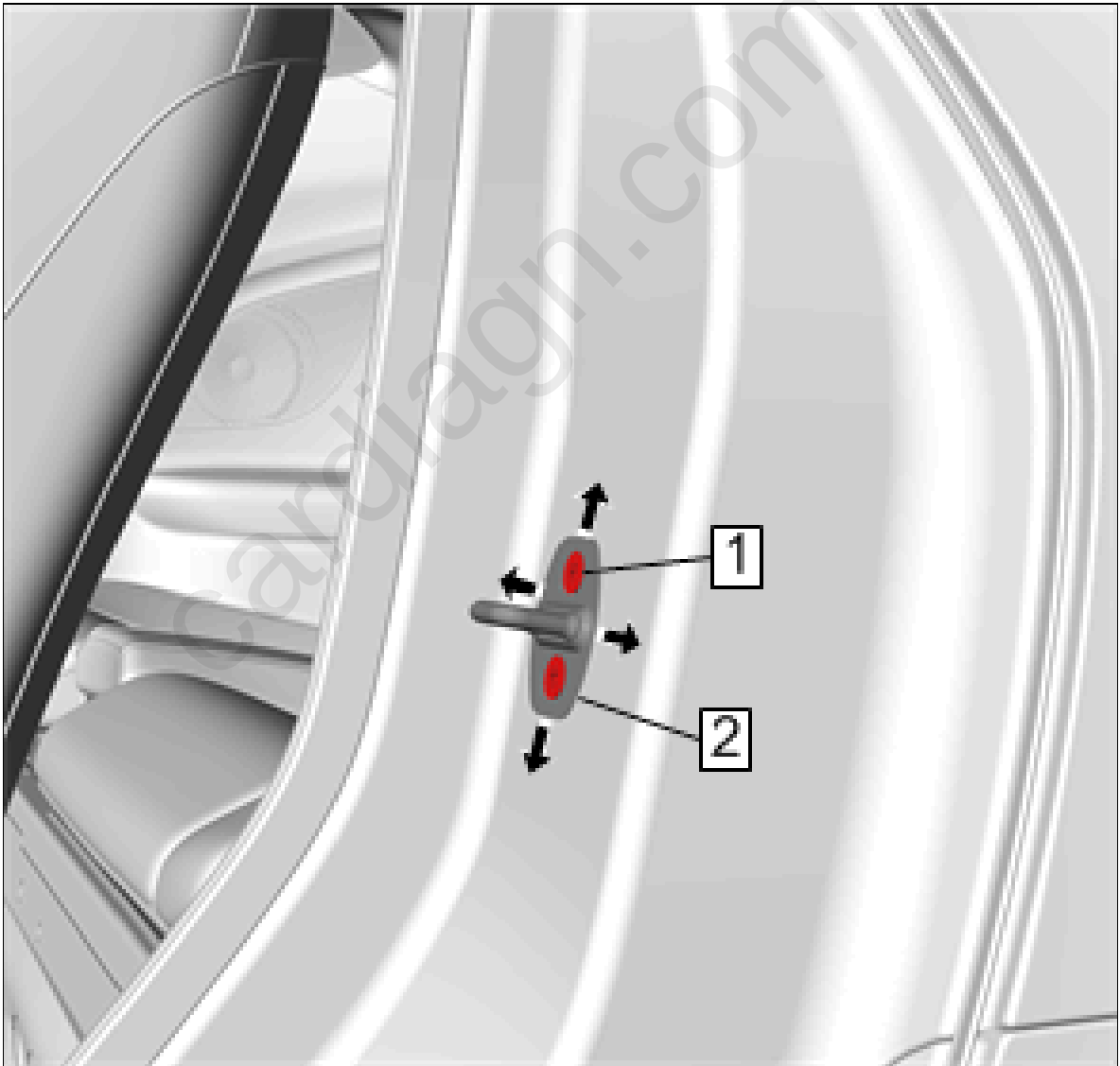
in the door pillar or quarter panel and the trim will need to be removed to gain access.

3. Using a soft marker, mark around the striker (2) for reference of the original position. Loosen the striker bolts (1) just enough to allow the movement of the door striker and shims if equipped.

 NOTE:

The striker plate (3) in relation to the welded portion of the bendable link is located on the back side of the lock pillar.

Fig 2: Door Striker



Courtesy of GENERAL MOTORS COMPANY

4. Use a suitable tool to adjust door striker up or down or inboard or outboard as required.

5. Move the striker to eliminate drag on the striker and door latch and to achieve proper door position within door opening. Start with up/down position, then position the striker to achieve proper alignment to the door opening. Set the in/out adjustment for proper door seal engagement ensuring that the door closing efforts are correct.



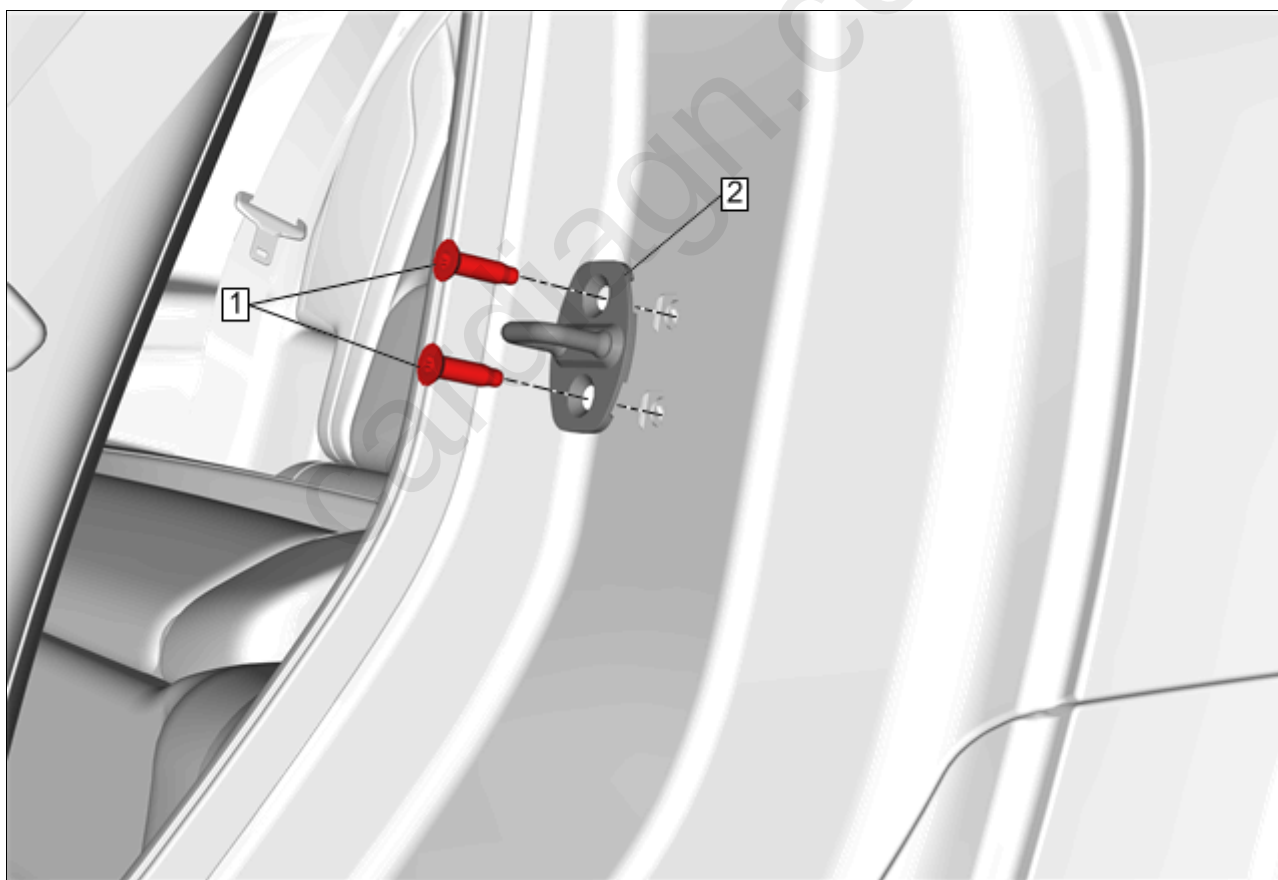
CAUTION:

Refer to Fastener Caution .

6. Adjust the spacers as required and tighten the screws to 25 N.m (18 lb ft).
7. Inspect the door latch system for proper operation.
8. Close the door.

REPAIR INSTRUCTIONS > FRONT SIDE DOOR LOCK STRIKER REPLACEMENT

Fig 1: Front Side Door Lock Striker



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Side Door Latch Striker Bolt (Qty: 2)

CAUTION:

Refer to Fastener Caution .

Tighten

25 N.m (18 lb ft)

2

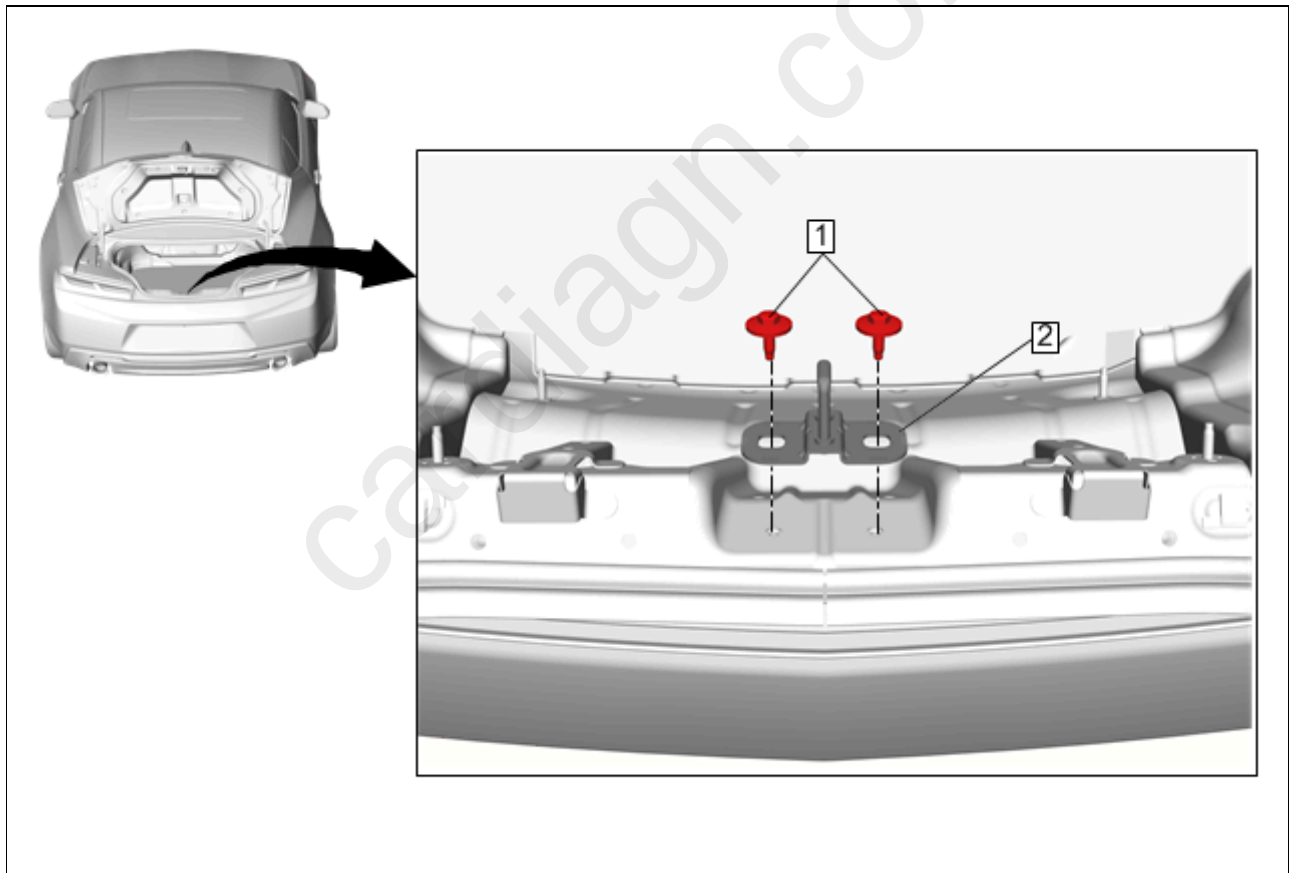
Front Side Door Lock Striker

Procedure

Front Side Door Lock Striker Adjustment

REPAIR INSTRUCTIONS > REAR COMPARTMENT LID LATCH STRIKER REPLACEMENT

Fig 1: Rear Compartment Lid Latch Striker



Courtesy of GENERAL MOTORS COMPANY

Callout

Component Name

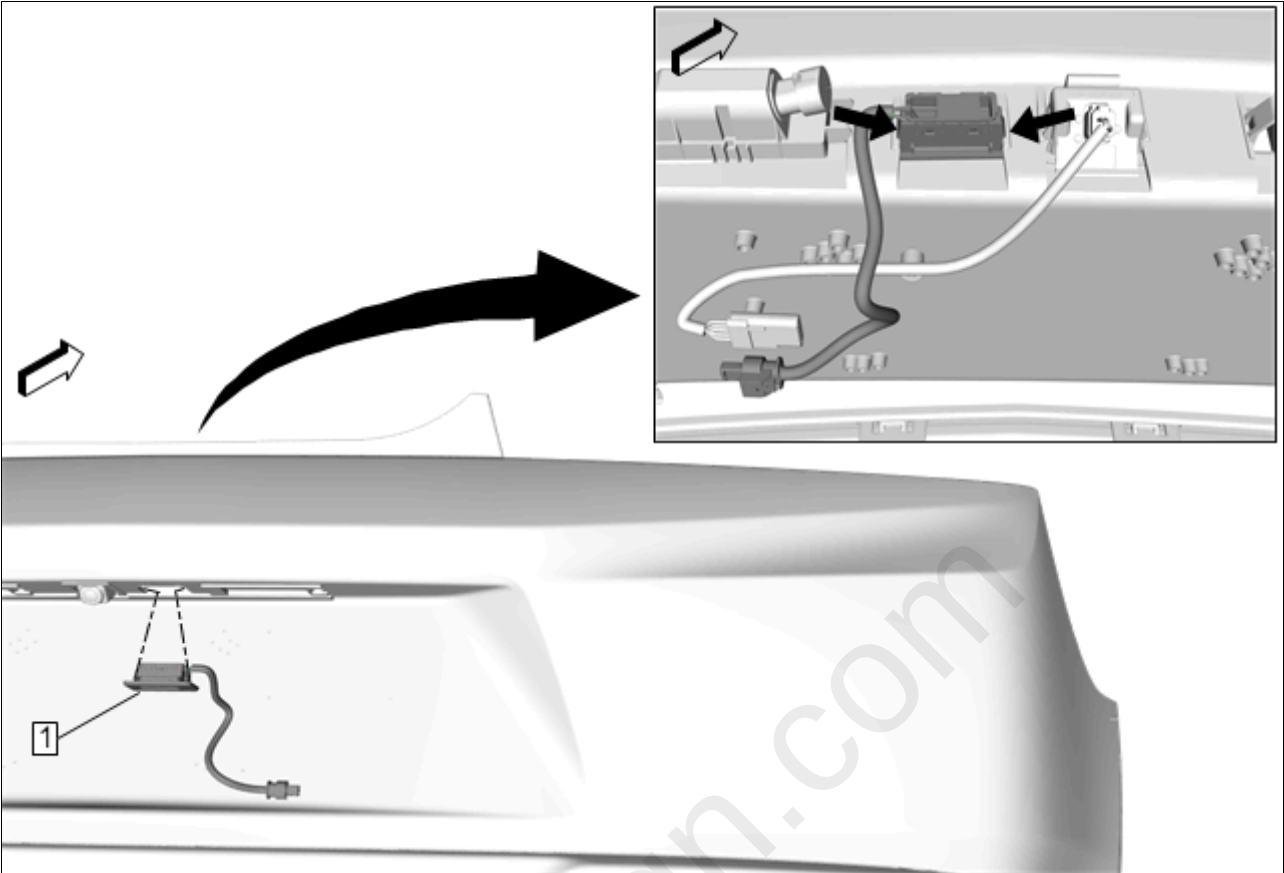
Preliminary Procedure

Rear End Trim Finish Panel Replacement

1	Rear Compartment Lid Latch Striker Bolt (Qty: 2) CAUTION: <i>Refer to Fastener Caution .</i> Procedure Use a grease pencil to outline the striker before removing the bolts. Tighten 10 N.m (89 lb in)
2	Rear Compartment Lid Latch Striker  NOTE: <i>If required, adjust the rear compartment lid latch striker after replacing.</i>

REPAIR INSTRUCTIONS > LIFTGATE RELEASE SWITCH REPLACEMENT

Fig 1: Liftgate Release Switch

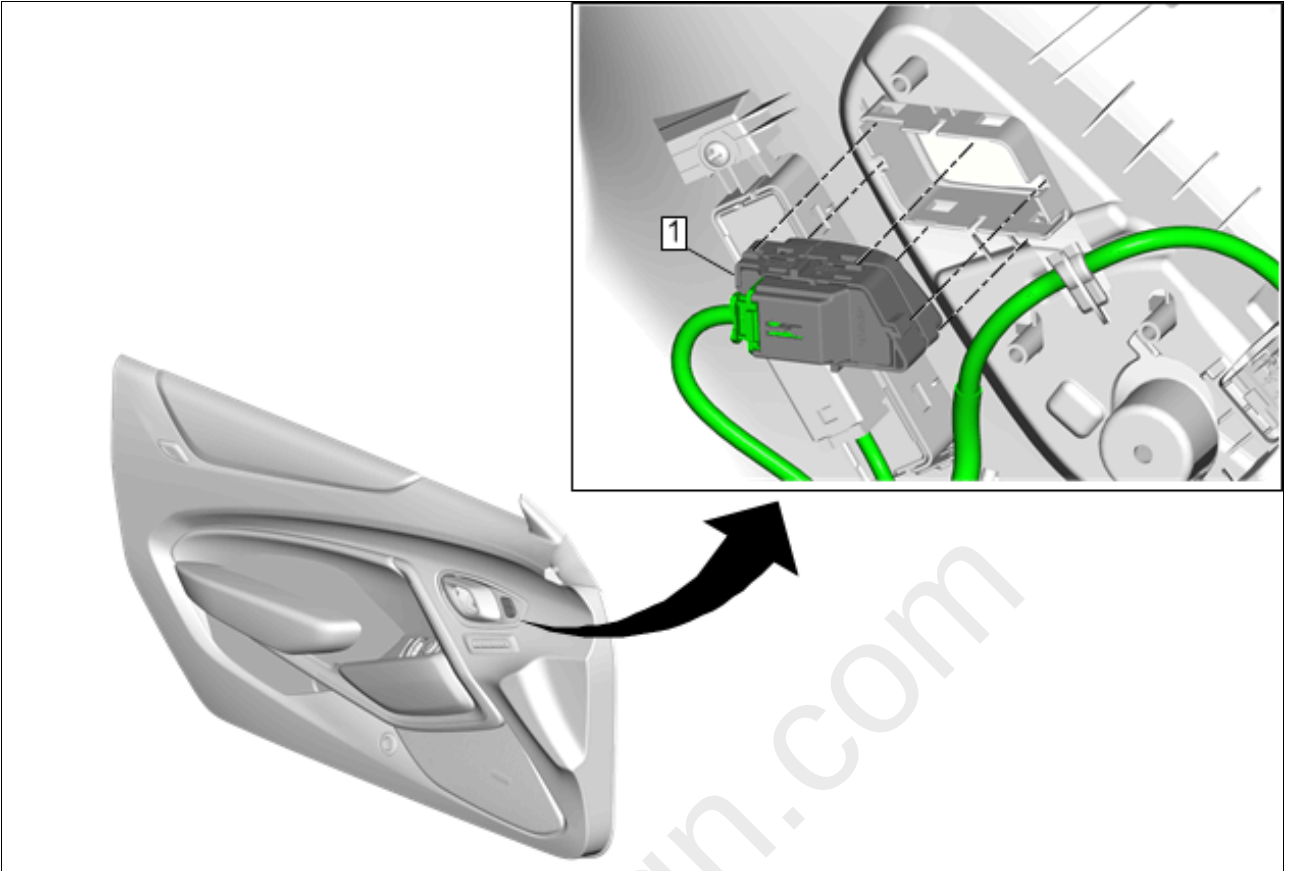


Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Rear Bumper Fascia Replacement	
1	Liftgate Release Switch Procedure Depress the retainers on the back side of the switch and push the switch out from the rear bumper fascia.

REPAIR INSTRUCTIONS > DOOR LOCK SWITCH REPLACEMENT - DRIVER SIDE

Fig 1: Door Lock Switch - Driver Side

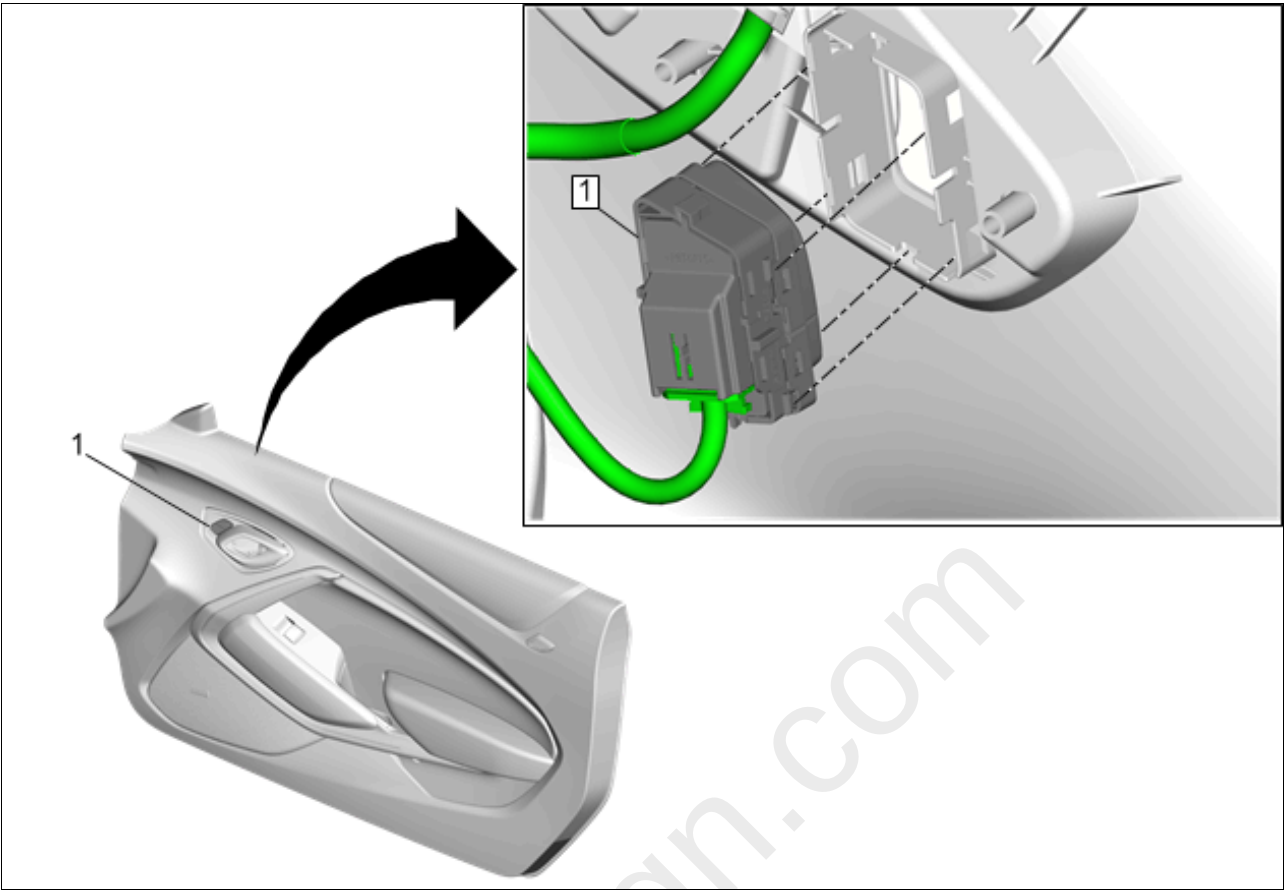


Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Side Door Trim Replacement	
1	Door Lock Switch Procedure 1. Reposition side door sounds dampener fabric. 2. From the backside of the door trim panel, use a plastic trim tool to gently push in on the side tabs to release the switch from the front side door trim. 3. Disconnect the electrical connector. 4. Control Module References for programming and setup information, if required.

REPAIR INSTRUCTIONS > DOOR LOCK SWITCH REPLACEMENT - PASSENGER FRONT

Fig 1: Door Lock Switch - Passenger Front

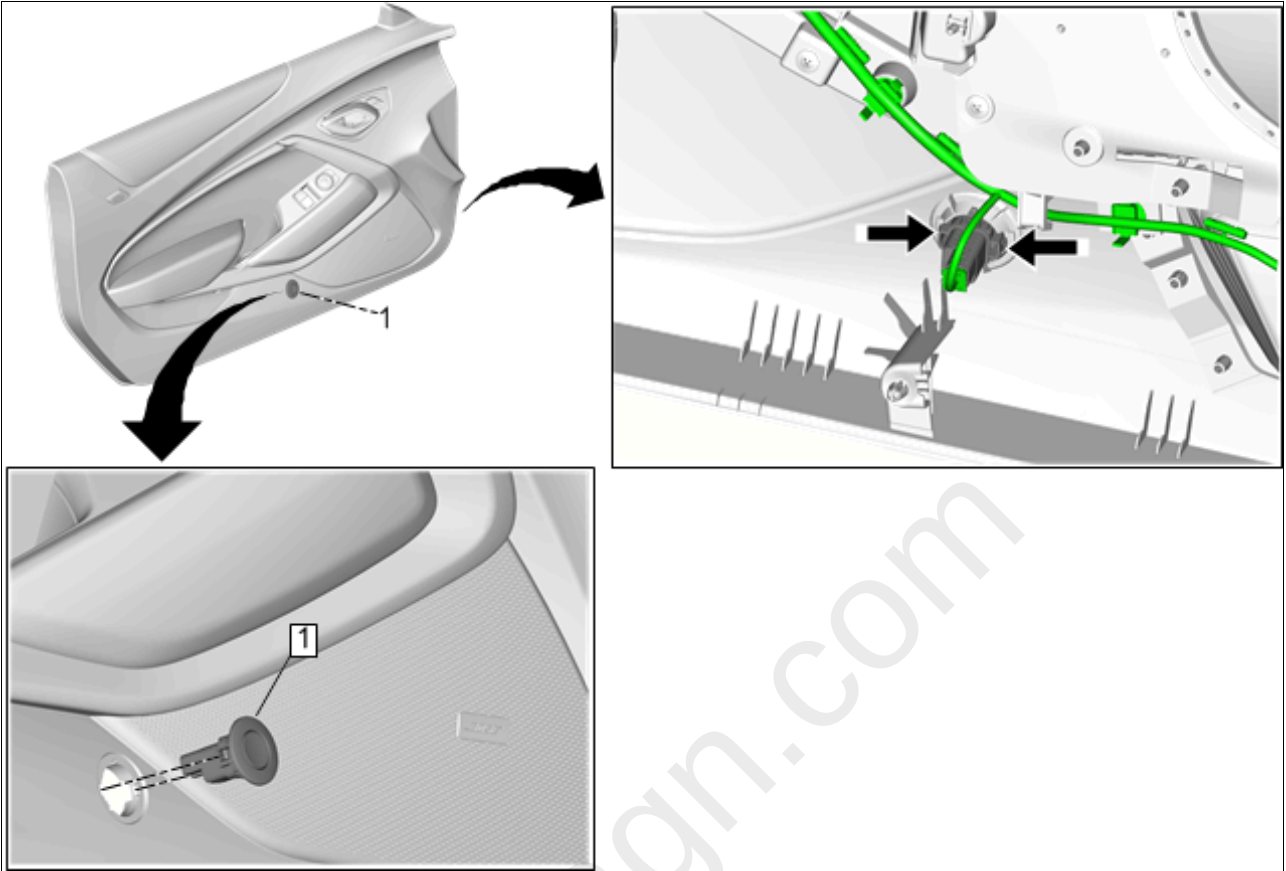


Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Front Side Door Trim Replacement 2. Reposition front side door trim sound dampener fabric.	
1	Door Lock Switch Passenger Front Procedure 1. From the backside of the door trim panel, use a plastic trim tool to gently push in on the side tabs to release the switch from the front side door trim. 2. Disconnect the electrical connector. 3. Control Module References for programming and setup information, if required.

REPLACEMENT

Fig 1: Rear Compartment Lid Release Switch



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Side Door Trim Replacement	
1	Rear Compartment Lid Release Switch Procedure 1. From the backside of the door trim panel, use a plastic trim tool to gently push in on the side tabs to release the switch from the front side door trim. 2. 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 cluster
- Driver door latch
- Passenger door latch
- Driver window motor
- Passenger window motor

DESCRIPTION AND OPERATION > DOOR AJAR INDICATOR DESCRIPTION AND OPERATION > DOOR AJAR

The window motor supplies a body system voltage signal to the door ajar switch within the door latch, when a door is open the door ajar switch closes pulling the signal low. When the window motor detects the drop in the ajar 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 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 than 8 km/h (5 mph).

DESCRIPTION AND OPERATION > DOOR AJAR INDICATOR DESCRIPTION AND OPERATION > TRUNK OPEN

The BCM supplies a body system voltage signal to the trunk ajar switch to indicate the status of the trunk, ajar switch within the trunk latch will close providing a ground path for the ajar signal. The BCM will detect the voltage drop and will then communicate this status to the instrument cluster via serial data message. The instrument cluster, upon receipt of this message, will illuminate the Trunk Open message in the driver information center.

DESCRIPTION AND OPERATION > FUEL FILL DOOR DESCRIPTION AND OPERATION > FUEL DOOR RELEASE SYSTEM COMPONENTS

- Body control module (BCM)
- Fuel door latch
- Fuel door relay

The fuel door relay switch and coil terminals are supplied with battery voltage at all times via the DR/LCK fuse located in the rear fuse block. The locking and unlocking of the fuel door is a function of the power door lock system. When the vehicles doors are unlocked, the body control module (BCM) receives a GMLAN serial data message that the doors have been locked via a door lock switch or a remote keyless entry (RKE) function. The BCM will respond by applying ground to the fuel door relay control circuit. This energizes the coil causing the switch contacts to close. With the switch contacts closed, battery voltage is supplied to the fuel door release actuator, unlocking the fuel door.

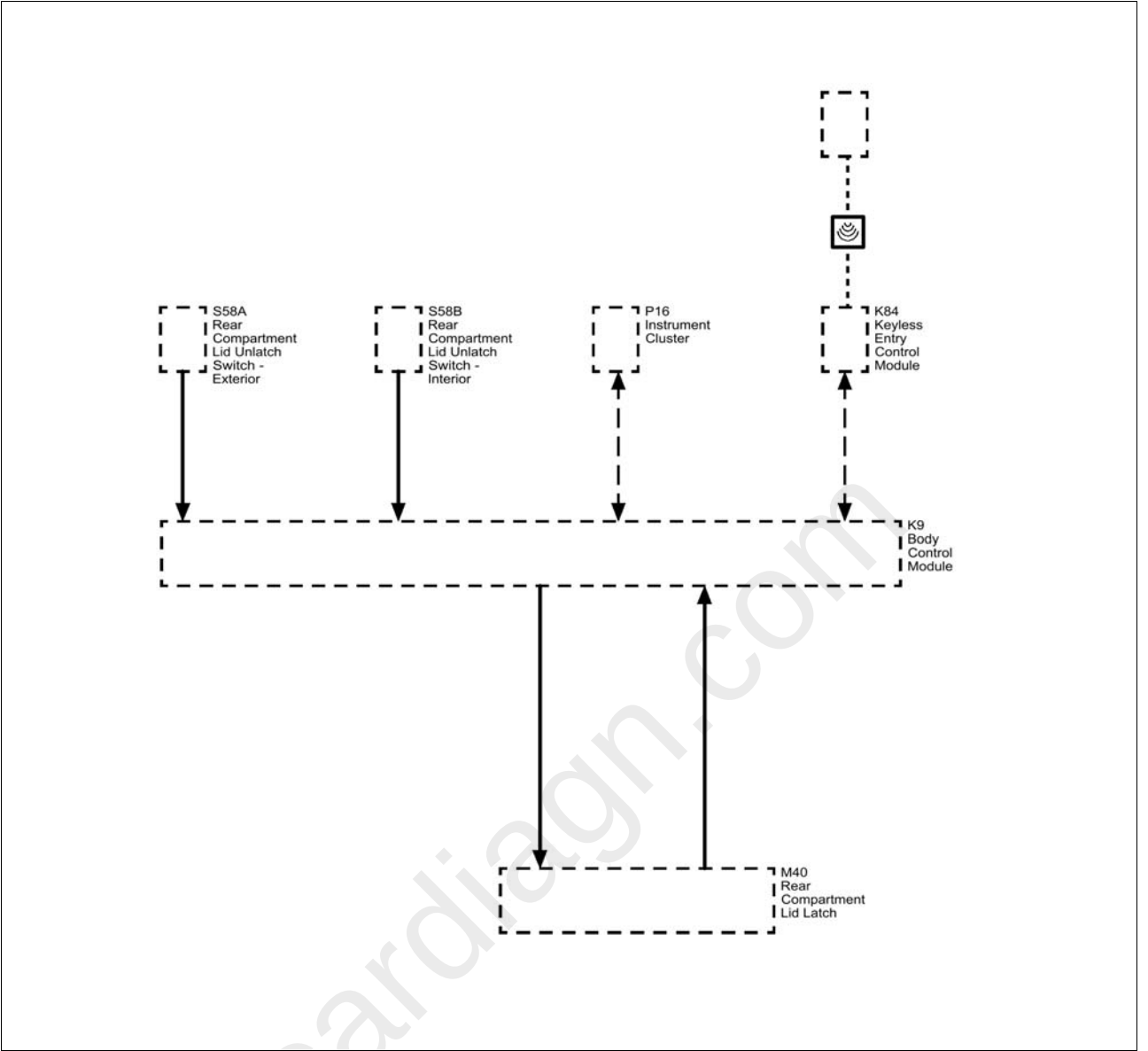
When locking the fuel door, the BCM removes ground from the fuel door relay control circuit causing the

relay switch contracts to open. With the relay in an non-energized state, the switch contacts are open to ground at G401. The BCM, upon receipt of a lock serial data signal, will apply ground to the door lock relay. This energizes the door lock relay causing the switch contacts to close. With the switch contacts closed, battery voltage is applied to the fuel door release actuator, rear door locks, rear door deadbolts, and front door deadbolts. The fuel door release actuator is supplied with ground through the open switch contacts of the fuel door relay to ground G401 causing the actuator to lock.

DESCRIPTION AND OPERATION > LUGGAGE COMPARTMENT DESCRIPTION AND OPERATION > REAR COMPARTMENT LID RELEASE SYSTEM COMPONENTS

- Body control module (BCM)
- Exterior rear compartment lid unlatch switch
- Interior rear compartment lid unlatch switch
- Rear compartment lid latch
- Trunk ajar switch (Part of the rear compartment lid latch)
- Rear body fuse block (Contains rear compartment lid unlatch PCB relay)

Fig 1: Luggage Compartment Block Diagram



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
K84	K84 Keyless Entry Control Module
P16	P16 Instrument Cluster
S58B	S58B Rear Compartment Lid Unlatch Switch - Interior
S58A	S58A Rear Compartment Lid Unlatch Switch - Exterior
K9	K9 Body Control Module
M40	M40 Rear Compartment Lid Latch

DESCRIPTION AND OPERATION > LUGGAGE COMPARTMENT DESCRIPTION AND OPERATION > REAR COMPARTMENT LID RELEASE OPERATION

Rear Compartment Lid Unlatch Switch

The BCM monitors a voltage signal to the interior and exterior rear compartment lid unlatch switch so that when either 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 vehicle doors are locked, the BCM will ignore the switches, if the vehicle doors have been unlocked, the BCM will recognize the request and will provide voltage to the rear compartment lid unlatch PCB relay.

Rear Compartment Lid Latch

When BCM receives a rear compartment lid release command from the exterior rear compartment lid unlatch switch, the BCM applies brief pulse of voltage to the rear compartment lid unlatch PCB relay control circuit, which energizes the coil side of the relay. The switch side of the rear compartment lid unlatch PCB relay then momentarily closes, supplying a brief pulse of battery positive voltage to the rear compartment lid latch. The rear compartment lid latch is continuously grounded and when it receives the voltage pulse, it will become energized and the latch will activate releasing the trunk lid so that the trunk lid may be manually raised to an open position.

Keyless Entry Transmitter

The BCM may also get a rear compartment lid release command from the remote keyless entry module. When the trunk button is pressed on the keyless entry transmitter, a rear compartment lid 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 rear compartment lid.

DESCRIPTION AND OPERATION > LUGGAGE COMPARTMENT DESCRIPTION AND OPERATION > TRUNK OPEN MESSAGE

The body control module (BCM) monitors the voltage level of the trunk ajar signal circuit which is normally at the system voltage when the trunk lid is closed. When the trunk lid is ajar or open, a switch within the latch assembly closes providing a path to ground for the trunk ajar signal circuit. The voltage within the signal circuit will then drop to 0 volts, the BCM will then detect the voltage drop and will send a serial data message to the instrument panel. The instrument panel will then display the Trunk Open message.

DESCRIPTION AND OPERATION > POWER DOOR LOCKS DESCRIPTION AND OPERATION > DOOR LOCK SYSTEM COMPONENTS

The power door lock system consists of the following components:

- Driver door lock switch
- Passenger door lock switch
- Body control module (BCM)
- Driver door latch

- Passenger door latch
- Exterior door handle switches
- Keyless entry control module

DESCRIPTION AND OPERATION > POWER DOOR LOCKS DESCRIPTION AND OPERATION > DOOR LOCK SYSTEM CONTROLS

The power door lock system can be controlled by any of the following:

- Power door lock switch activation
- Keyless entry lock or unlock command
- A door lock cylinder switch Unlock actuation
- Delayed locking command
- Automatic door lock command

DESCRIPTION AND OPERATION > POWER DOOR LOCKS DESCRIPTION AND OPERATION > DOOR LOCK AND UNLOCK OPERATION

When a door lock switch is activated in the lock or unlock position the 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 battery 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 and fuel filler door 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

The driver door lock actuator is isolated so it can be unlocked by itself using the keyless entry transmitter.

DESCRIPTION AND OPERATION > POWER DOOR LOCKS DESCRIPTION AND OPERATION > PASSIVE DOOR LOCK/UNLOCK OPERATION

The exterior door handle switch signal circuits provide inputs to the keyless entry control module when the exterior door handle switches are activated. These inputs allow the keyless entry control module to detect a door lock or a door unlock request. The keyless entry control module provides a 12 V signal to

each exterior door handle switch via the door handle switch signal circuits. When a door handle switch is pressed, the switch closes and the voltage signal within the signal circuit is pulled to ground. The keyless entry control module will detect the voltage drop and a low frequency antenna will transmit a challenge to the keyless entry transmitter. If the challenge is met, the keyless entry transmitter will respond, and the keyless entry control module will send a serial data message to the body control module to command the door(s) to be locked or unlocked

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