Park Brake - Hummer H2

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Caliper Mounting Bracket to Axle Flange Nuts	135 N.m	100 lb ft
Cable Support Bracket Bolts	85 N.m	64 lb ft
Park Brake Cable Guide to Frame Bolt	12 N.m	106 lb in
Park Brake Cable to Rear Axle Clip Bolt	25 N.m	18 lb ft
Park Brake Cable to Shock Absorber Bracket Bolt	25 N.m	18 lb ft
Park Brake Lever Mounting Bolts	25 N.m	18 lb ft
Park Brake Warning Lamp Switch Bolt	3 N.m	25 lb in

DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC STARTING POINT - PARK BRAKE

Begin the system diagnosis by reviewing the system description and operation. Reviewing the description and operation information will help you determine the correct symptom diagnostic procedure when a malfunction exists. Reviewing the description and operation information will also help you determine if the condition described by the customer is normal operation. Refer to **Symptoms - Park Brake** in order to identify the correct procedure for diagnosing the system and where the procedure is located.

SYMPTOMS - PARK BRAKE

IMPORTANT: Review the system operation in order to familiarize yourself with the system functions.

Refer to **Park Brake System Description and Operation** .

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the park brake system.
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

Symptom List

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

Park Brake Will Not Hold or Release

PARK BRAKE WILL NOT HOLD OR RELEASE

Park Brake Will Not Hold or Release

Step	Action	Yes	No
1	Were you sent here from the Park Brake Symptom table?	Go to **Step 2**	Go to **Diagnostic Starting Point - Park Brake**
2	Inspect the park brake system for proper operation. Refer to **Park Brake System Diagnosis** . Did you find and correct a condition?	Go to **Step 5**	Go to **Step 3**
3	Inspect the disc brake system for proper operation. Refer to **Disc Brake System Diagnosis** in Hydraulic Brakes. Did you find and correct a condition?	Go to **Step 5**	Go to **Step 4**
4	Inspect the hydraulic brake system for proper operation. Refer to **Hydraulic Brake System Diagnosis** in Hydraulic Brakes. Did you find and correct a condition?	Go to **Step 5**	Go to **Diagnostic Starting Point - Park Brake**
5	Road test the vehicle in order to confirm proper operation. Refer to **Brake System Vehicle Road Test** in Hydraulic Brakes. Is the condition still present?	Go to **Step 2**	System OK

PARK BRAKE SYSTEM DIAGNOSIS

Park Brake System Diagnosis

Step	Action	Yes	No
DEFINITION: This diagnostic table is designed to diagnose ONLY the components of the PARK brake system in order to determine if the PARK brake system is operating properly. You will be directed by the appropriate Symptom Table to go to other brake system diagnostic tables as appropriate.			
1	Were you sent here from a Hydraulic Brake Symptom Table?	Go to **Step 4**	Go to **Step 2**
2	Were you sent here from a Park Brake Symptom Table?	Go to **Step 4**	Go to **Step 3**
3	Is the symptom related to the ability of the park brake system to hold and/or release?	Go to **Diagnostic Starting Point - Park Brake**	Go to **Diagnostic Starting Point - Hydraulic Brakes** in Hydraulic Brakes
4	1. Raise and support the vehicle with the rear axle supported by jack stands. Refer to **Lifting and Jacking the Vehicle** in General Information. 2. Shift the transmission into NEUTRAL. 3. With the park brake RELEASED, attempt to rotate the rear wheels to check the rear brakes for		

	a significant amount of drag. Do the rear brakes have a significant amount of drag?	Go to **Step 11**	Go to **Step 5**
5	1. Shift the transmission into NEUTRAL. 2. Apply the park brake. 3. Attempt to rotate the rear wheels to check the rear brakes for a significant amount of drag. Do the rear brakes have a significant amount of drag?	Go to **Step 6**	Go to **Step 7**
6	1. Release the park brake. 2. Rotate the rear wheels to check the rear brakes for a significant reduction in the amount of drag. Did the rear brakes exhibit a significant reduction in the amount of drag?	Go to **Step 22**	Go to **Step 11**
7	Visually check the park brake cable connections and the cables that are accessible on the UNDERSIDE of the vehicle for disconnections and/or damage. Were any or the park brake cables disconnected and/or damaged?	Go to **Step 8**	Go to **Step 9**
8	Reconnect or replace the park brake cables as necessary. Refer to the following procedures as necessary: • **Park Brake Cable Replacement - Front** • **Park Brake Cable Replacement - Left Rear** • **Park Brake Cable Replacement - Right Rear** Did you complete the repair and/or replacement?	Go to **Step 9**	-
9	Check the adjustment of the park brake. Refer to **Park Brake Adjustment** . Was the park brake adjusted properly?	Go to **Step 11**	Go to **Step 10**
10	Adjust the park brake. Refer to **Park Brake Adjustment** . Were you able to attain adjustment of the park brake?	Go to **Step 16**	Go to **Step 11**
11	**NOTE:** **Do not depress the brake pedal with the brake rotors and/or the brake drums removed, or with the brake calipers repositioned away from the brake rotors, or damage to the brake system may result.** 1. Remove the rear brake rotors. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.		

	2. Inspect the park brake shoe hardware for looseness, damaged, broken or missing components. 3. Check the park brake actuators for a seized condition. Does the park brake hardware and/or the park brake actuators require replacement?	Go to **Step 12**	Go to **Step 13**
12	1. Replace park brake hardware components as necessary. Refer to **Park Brake Shoe Replacement** . 2. Replace the park brake actuators as necessary. Refer to **Park Brake Actuator Replacement** . Did you complete the replacement?	Go to **Step 13**	-
13	Have an assistant apply and release the park brake, while you observe the park brake cables for free movement. Did the park brake cables move freely?	Go to **Step 14**	Go to **Step 17**
14	Check the adjustment of the park brake. Refer to **Park Brake Adjustment** . Was the park brake adjusted properly?	Go to **Step 16**	Go to **Step 15**
15	Adjust the park brake. Refer to **Park Brake Adjustment** . Were you able to attain adjustment of the park brake?	Go to **Step 16**	Go to **Step 25**
16	1. With the transmission still in NEUTRAL, apply the park brake. 2. Attempt to rotate the rear wheels to check the rear brakes for a significant amount of drag. 3. Release the park brake. 4. Rotate the rear wheels to check the rear brakes for a significant reduction of drag. Did the park brake apply and release properly?	Go to **Step 27**	Return to Symptom Table
17	Disconnect the park brake cable connections that are accessible on the UNDERSIDE of the vehicle one at a time and check each cable for free movement. Do any of the park brake cables accessible on the underside of the vehicle require replacement?	Go to **Step 18**	Go to **Step 19**
	Replace any of the park brake cables that do not have free movement and/or are not releasing properly. Refer to the following procedures as necessary: • **Park Brake Cable Replacement - Front**		

18	• **Park Brake Cable Replacement - Left Rear** • **Park Brake Cable Replacement - Right Rear** Did you complete the replacement?	Go to **Step 19**	-
19	1. Disconnect the front park brake cable connection accessible INSIDE the vehicle at the park brake pedal assembly and check for free movement. 2. Replace the front park brake cable if it does not have free movement. Refer to **Park Brake Cable Replacement - Front** . Did you find and correct a condition?	Go to **Step 25**	Go to **Step 20**
20	1. Disconnect the park brake release handle assembly cable connection from the park brake pedal assembly and check for free movement. 2. Replace the park brake release handle assembly if the release cable does not have free movement. Refer to **Park Brake Release Handle Assembly Replacement** . Did you find and correct a condition?	Go to **Step 25**	Go to **Step 21**
21	Replace the park brake pedal assembly that is not releasing properly. Refer to **Park Brake Pedal Assembly Replacement** . Did you complete the replacement?	Go to **Step 25**	-
22	Check the adjustment of the park brake. Refer to **Park Brake Adjustment** . Is the park brake adjusted properly?	Go to **Step 27**	Go to **Step 23**
23	Adjust the park brake. Refer to **Park Brake Adjustment** . Were you able to attain adjustment of the park brake system?	Go to **Step 26**	Go to **Step 24**
24	1. Remove the rear brake rotors, if they have not yet been removed. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes. 2. Check the park brake actuators for a seized condition. 3. Replace the park brake actuators as necessary. Refer to **Park Brake Actuator Replacement** . Did you find and correct a condition?	Go to **Step 25**	Return to Symptom Table
	Adjust the park brake. Refer to **Park Brake**		

25	**Adjustment** . Were you able to attain adjustment of the park brake system?	Go to **Step 26**	Return to Symptom Table
26	1. With the transmission still in NEUTRAL, apply the park brake. 2. Attempt to rotate the rear wheels to check the rear brakes for a significant amount of drag. 3. Release the park brake. 4. Rotate the rear wheels to check the rear brakes for a significant reduction of drag. Did the park brake apply and release properly?	Go to **Step 27**	Return to Symptom Table
27	Install or connect any components that were removed or disconnected during diagnosis. Did you complete the operation?	Park Brake System OK Return to Symptom Table	-

PARK BRAKE SHOE INSPECTION

CAUTION: Refer to Brake Dust Caution in Cautions and Notices.

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the tire and wheel. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
3. Remove the rear brake caliper bracket with the rear brake caliper. Refer to **Brake Caliper Bracket Replacement - Rear** in Disc Brakes.
4. Remove the rear brake rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.

   or

5. Inspect and replace the park brake shoe and lining if any of the following conditions are found:
   - Excessive wear indicated by the park brake lining being worn down to the shoe
   - Brake lining cracking
   - Oil or fluid contamination of the brake lining
6. Adjust the park brake shoe. Refer to **Park Brake Adjustment** in Park Brake.
7. Install the rear brake rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.
8. Install the rear brake caliper with the rear brake caliper bracket. Refer to **Brake Caliper Bracket Replacement - Rear** in Disc Brakes.
9. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
10. Lower the vehicle.

REPAIR INSTRUCTIONS

PARK BRAKE SHOE REPLACEMENT

CAUTION: Refer to Brake Dust Caution in Cautions and Notices.

Removal Procedure

1. Disable the park brake cable automatic adjuster. Refer to **Disabling the Park Brake Cable Automatic Adjuster** .
2. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
3. Remove the tire and the wheel. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
4. Remove the caliper and mounting bracket as an assembly. Refer to **Brake Pads Replacement - Rear** in Disc Brakes.
5. Remove the rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.

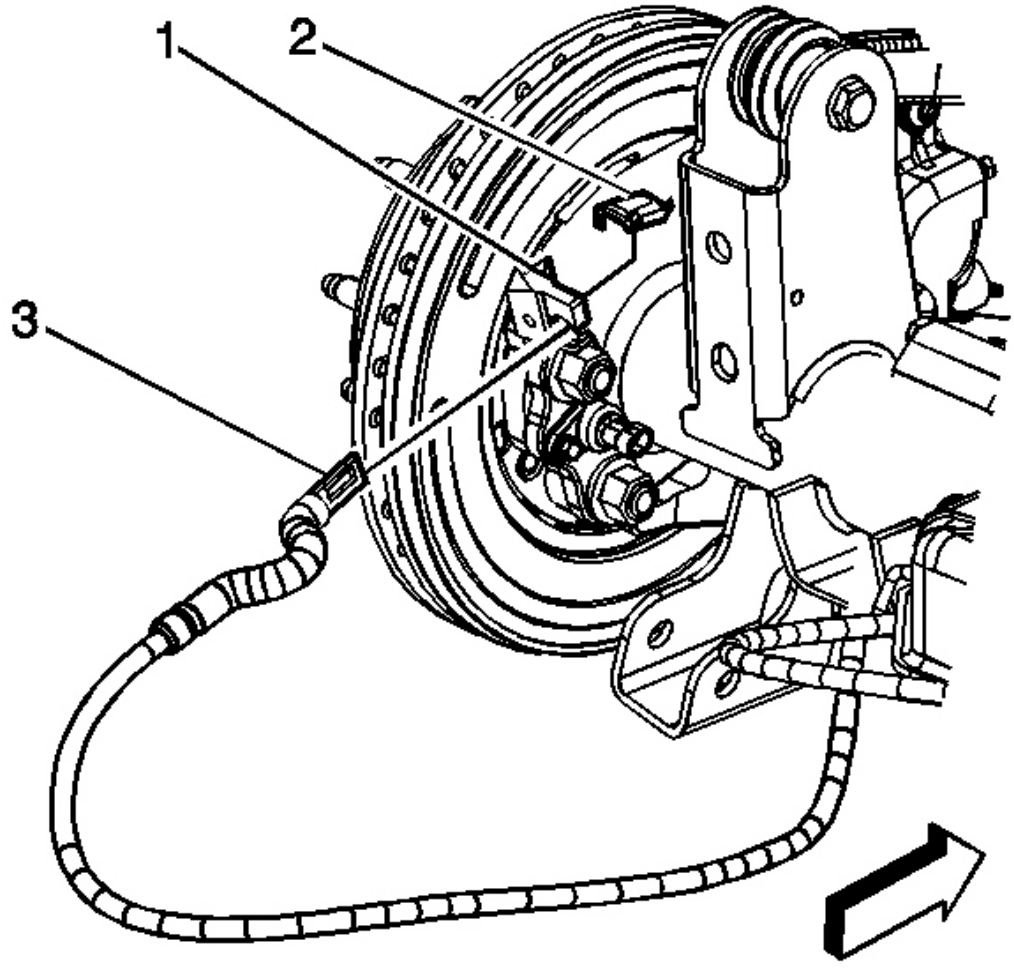


Fig. 1: Cable, Lever & Backing Plate
Courtesy of GENERAL MOTORS CORP.

6. Remove the cable (3) from the backing plate (1) by compressing the spring to access and depress the locking tabs, pull the cable out of the backing plate, and routing the cable through the slot in the backing plate.
7. Remove the cable (3) from the lever (2).
8. Remove the axle shaft. Refer to **Rear Axle Shaft Replacement** in Rear Drive Axle.

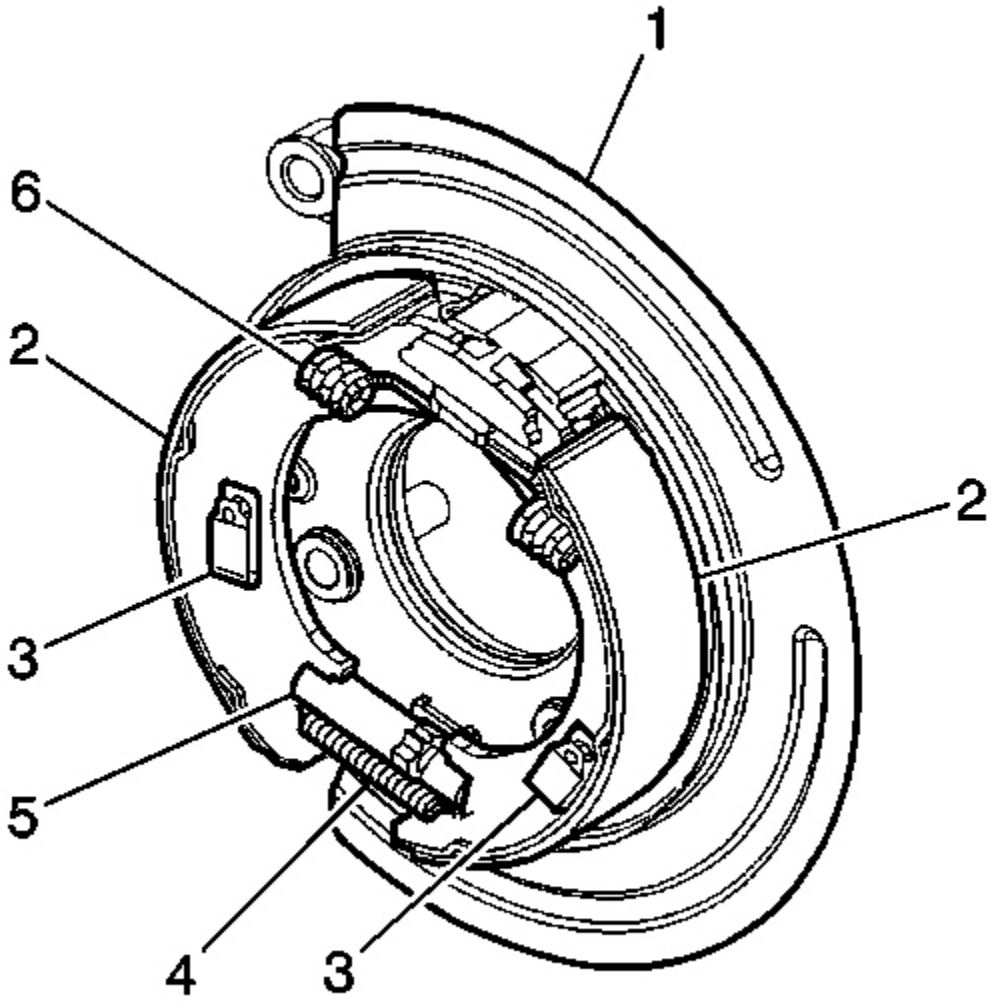


Fig. 2: Park Brake Shoe Return Springs
Courtesy of GENERAL MOTORS CORP.

9. Remove the park brake shoe return springs (4, 6).

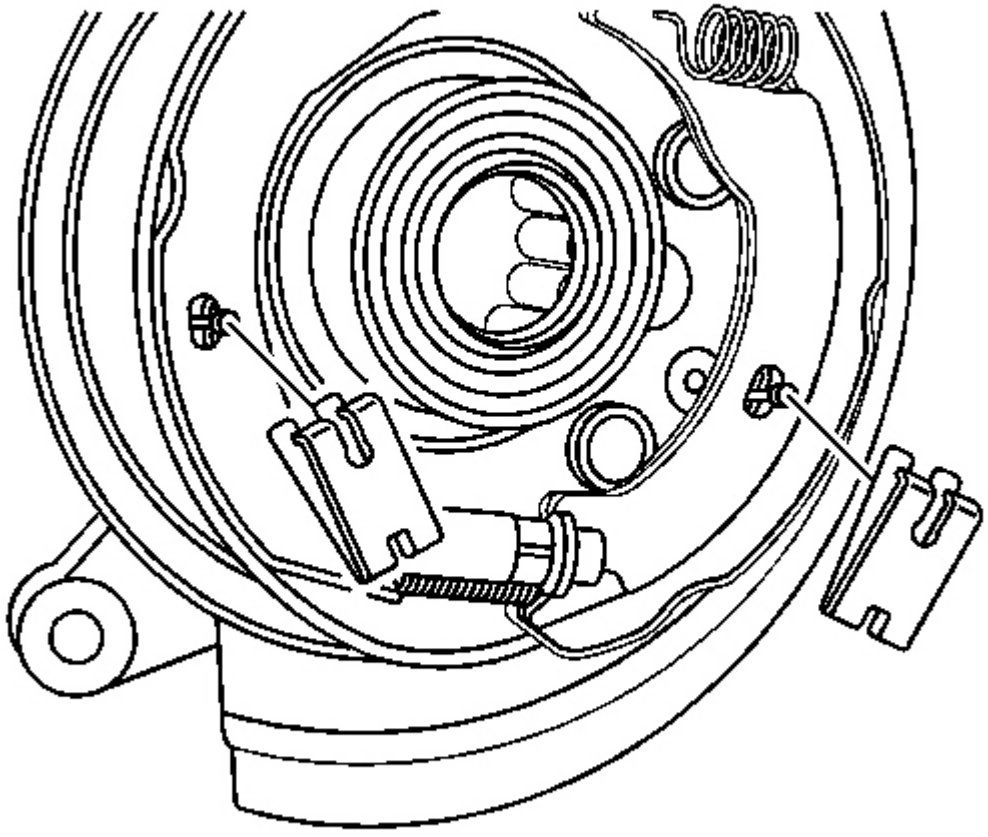


Fig. 3: Park Brake Shoes
Courtesy of GENERAL MOTORS CORP.

10. Remove the park brake shoe anchor springs and pins.
11. Remove the park brake shoes.

Installation Procedure

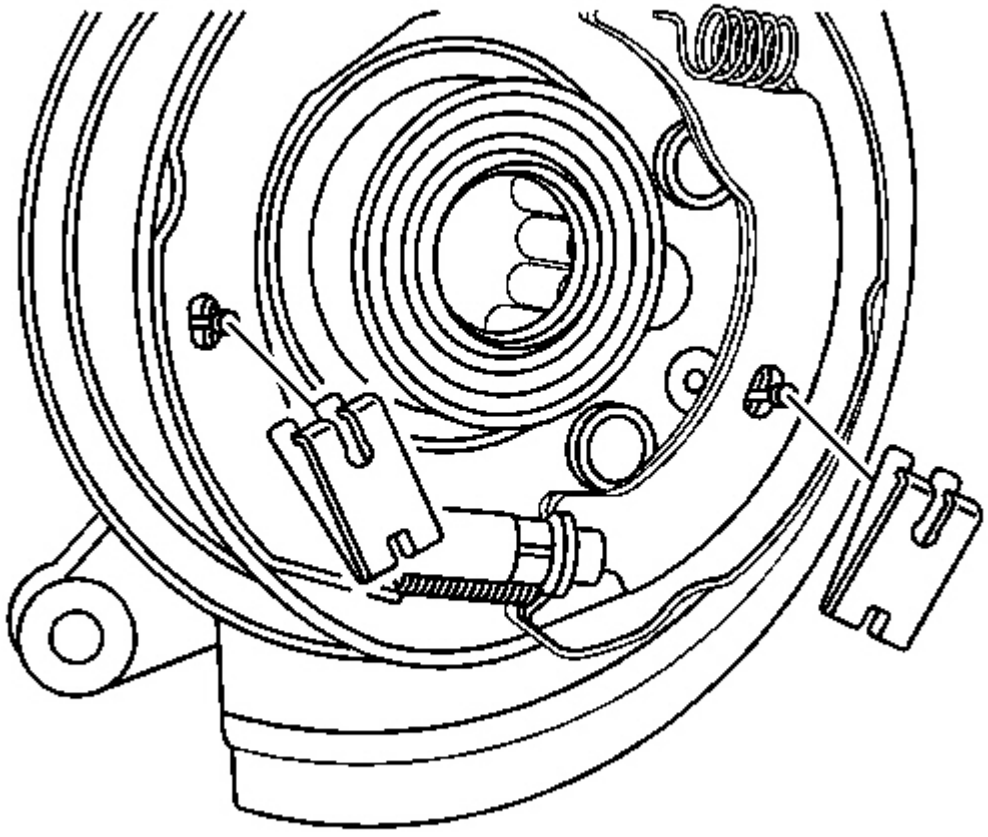


Fig. 4: Park Brake Shoes
Courtesy of GENERAL MOTORS CORP.

1. Clean the debris and the dust from the park brake components using a clean towel.
2. Install the park brake shoes.
3. Install the park brake shoe anchor springs and pins.

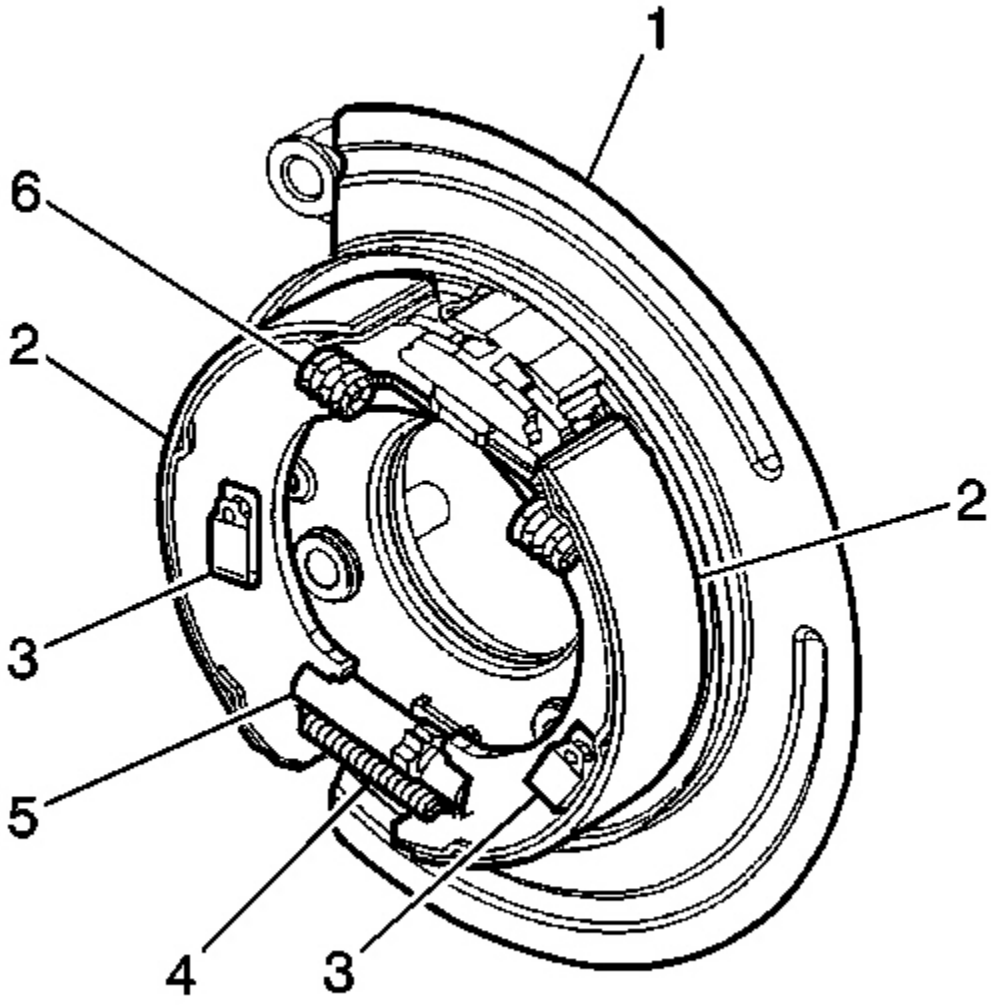


Fig. 5: Park Brake Shoe Return Springs
Courtesy of GENERAL MOTORS CORP.

4. Install the park brake shoe return springs (4, 6).
5. Adjust the park brake shoe. Refer to **Park Brake Adjustment** .
6. Install the axle shaft. Refer to **Rear Axle Shaft Replacement** in Rear Drive Axle.
7. Install the rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.

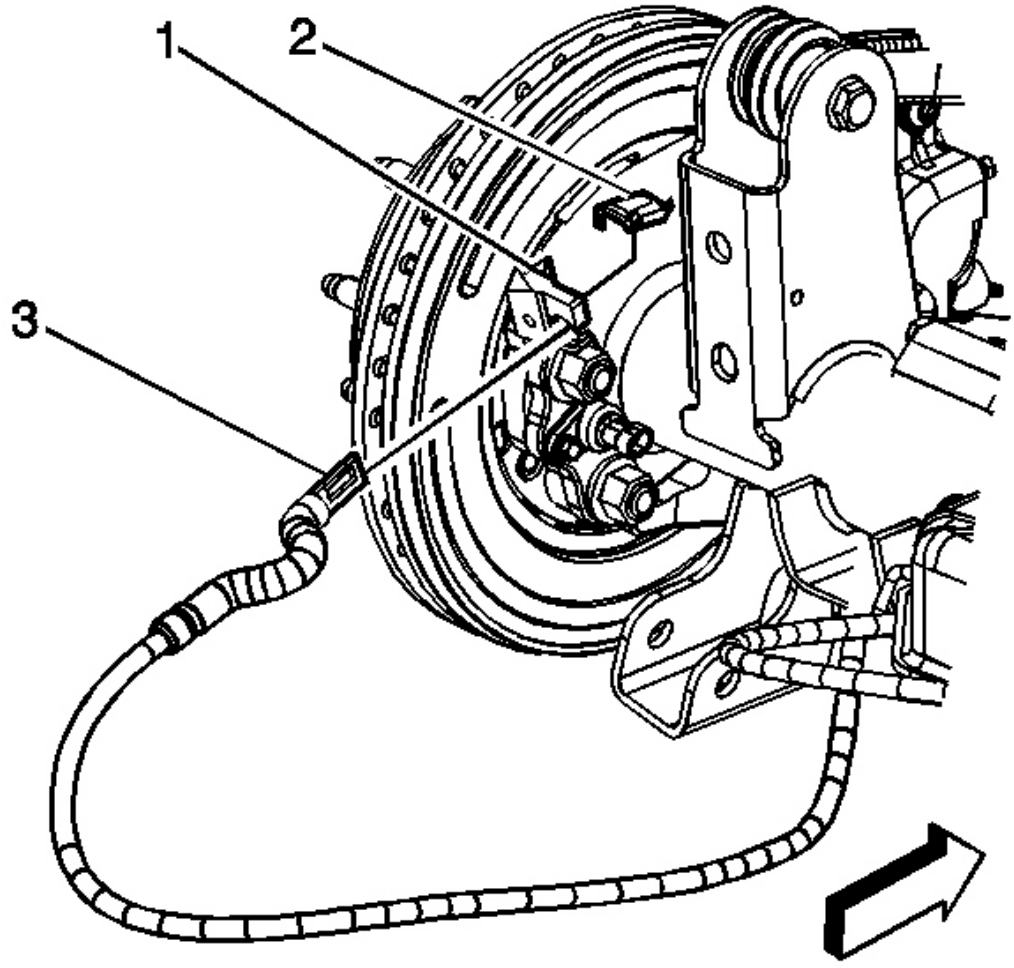


Fig. 6: Cable, Lever & Backing Plate
Courtesy of GENERAL MOTORS CORP.

8. Install the cable (3) to the lever (2).
9. install the cable (3) to the backing plate (1) by compressing the spring, routing the cable through the slot in the backing plate and pressing the cable into the backing plate until the locking tabs snap into place.
10. Install the caliper and mounting bracket as an assembly. Refer to **Brake Pads Replacement - Rear** in Disc Brakes.
11. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
12. Remove the safety stands.
13. Lower the vehicle.

14. Enable the park brake cable automatic adjuster. Refer to **Enabling the Park Brake Cable Automatic Adjuster** .

PARK BRAKE RELEASE HANDLE ASSEMBLY REPLACEMENT

Removal Procedure

CAUTION: Refer to Battery Disconnect Caution in Cautions and Notices.

1. Disconnect the negative battery cable. Refer to **Battery Negative Cable Disconnect/Connect Procedure (Single Battery)** in Engine Electrical.

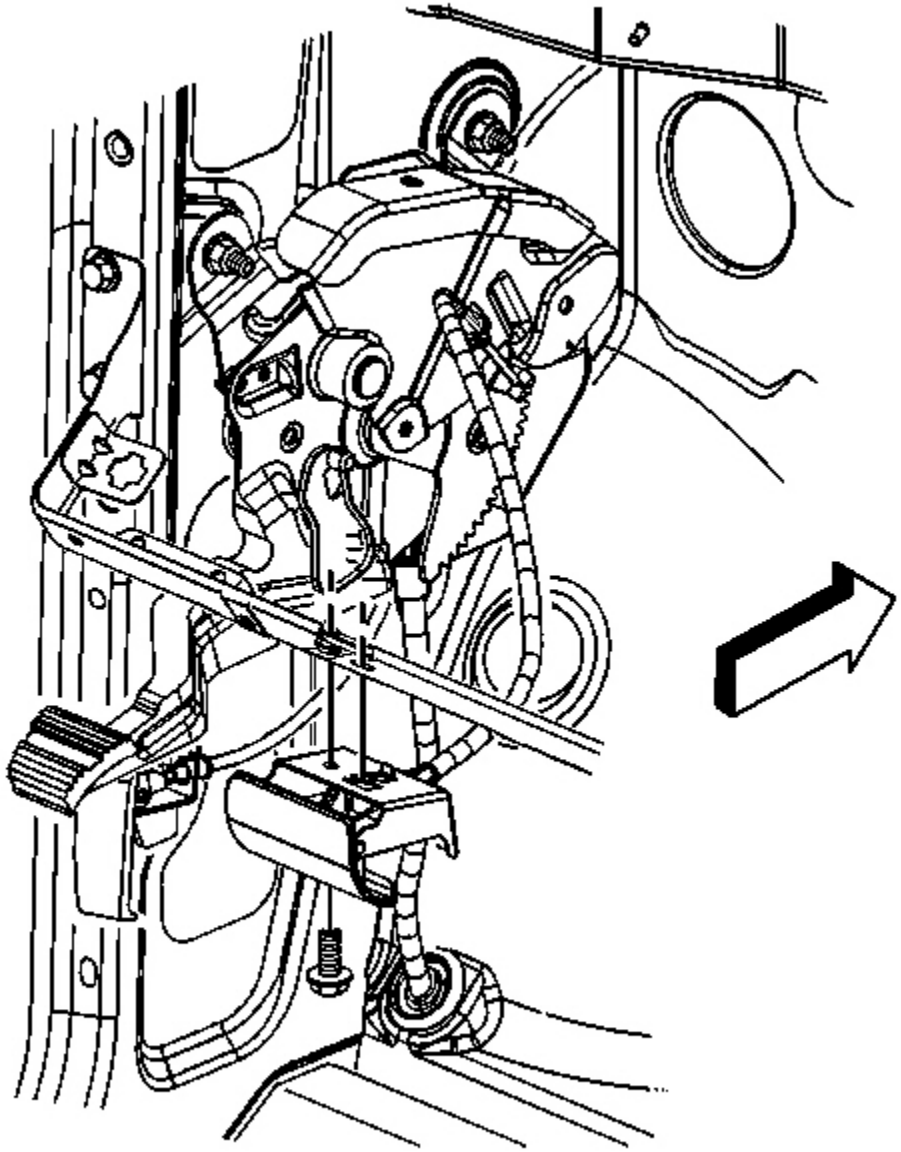


Fig. 7: Park Brake Release Lever Handle & Bolt
Courtesy of GENERAL MOTORS CORP.

2. Remove the park brake release lever mounting bolt.
3. Remove the park brake release lever handle from the knee bolster.
4. Remove the MID-Bussed Electrical Center from the bracket.

5. Remove the park brake release cable housing from the pedal assembly.
6. Remove the park brake release cable from the pedal assembly.
7. Note the routing of the cable as you remove the park brake release handle assembly from the vehicle.

Installation Procedure

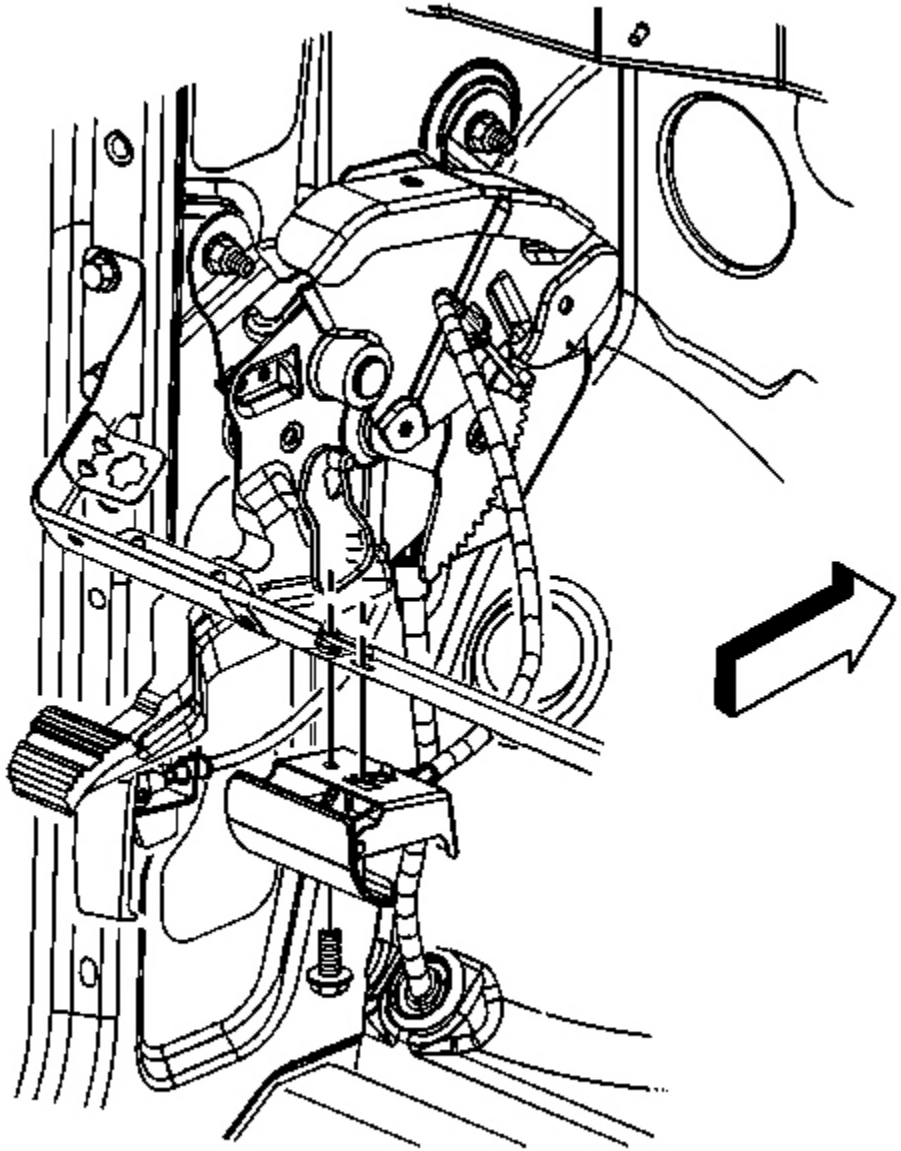


Fig. 8: Park Brake Release Lever Handle & Bolt
Courtesy of GENERAL MOTORS CORP.

1. Install the park brake release handle assembly to the vehicle. Install the cable using the same routing as the original cable.
2. Install the park brake release cable to the pedal assembly.
3. Install the park brake release cable housing to the pedal assembly.
4. Install the MID-Bussed Electrical Center to the bracket.
5. Install the park brake release lever handle to the knee bolster.

NOTE: Refer to Fastener Notice in Cautions and Notices.

6. Install the park brake release lever mounting bolt.

   Tighten: Tighten the bolt to 25 N.m (18 lb ft).

7. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnect/Connect Procedure (Single Battery)** in Engine Electrical.

PARK BRAKE PEDAL ASSEMBLY REPLACEMENT

Removal Procedure

CAUTION: Refer to Battery Disconnect Caution in Cautions and Notices.

1. Disconnect the negative battery cable. Refer to **Battery Negative Cable Disconnect/Connect Procedure (Single Battery)** in Engine Electrical.
2. Disable the park brake cable automatic adjuster. Refer to **Disabling the Park Brake Cable Automatic Adjuster** .
3. Remove the left side hinge pillar panel. Refer to **Trim Replacement - Hinge Pillar** in Interior Trim.
4. Remove the MID-Bussed Electrical Center from the bracket.

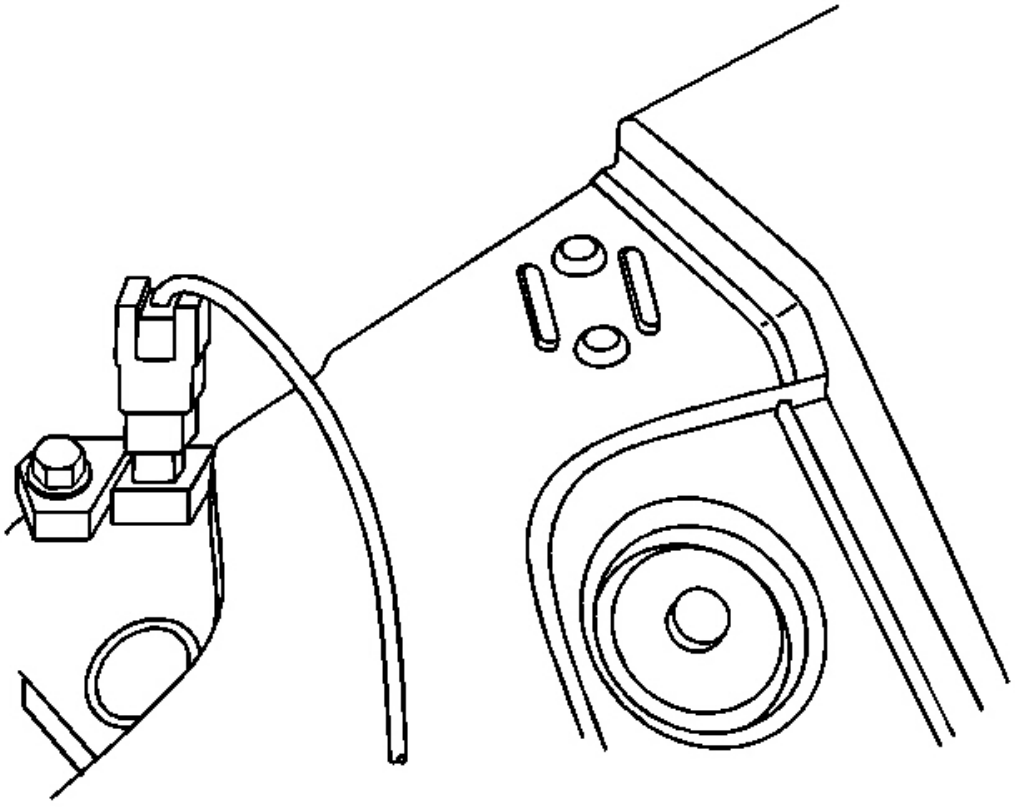


Fig. 9: Park Brake Warning Lamp Connection
Courtesy of GENERAL MOTORS CORP.

5. Disconnect the park brake warning lamp connection.

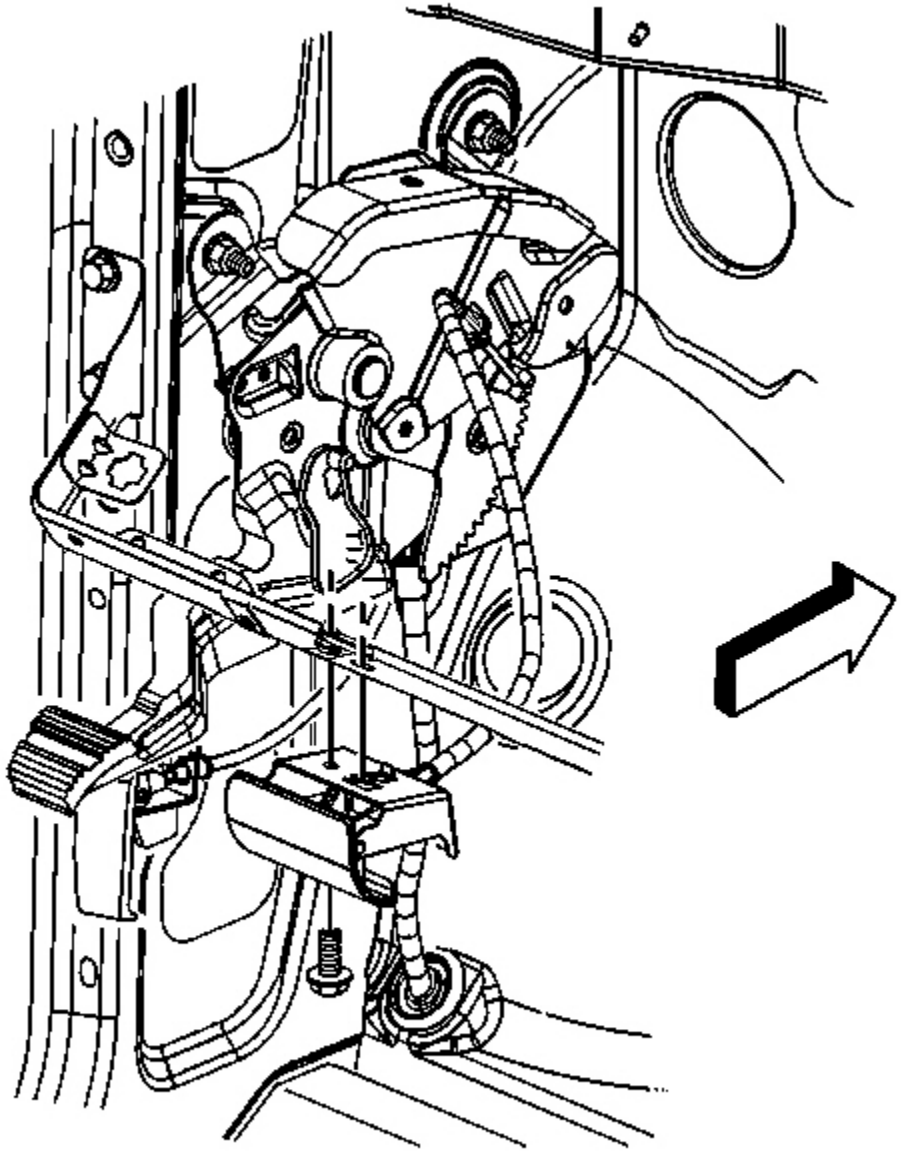


Fig. 10: Park Brake Release Lever Handle & Bolt
Courtesy of GENERAL MOTORS CORP.

6. Disconnect the park brake release cable from the park brake lever.

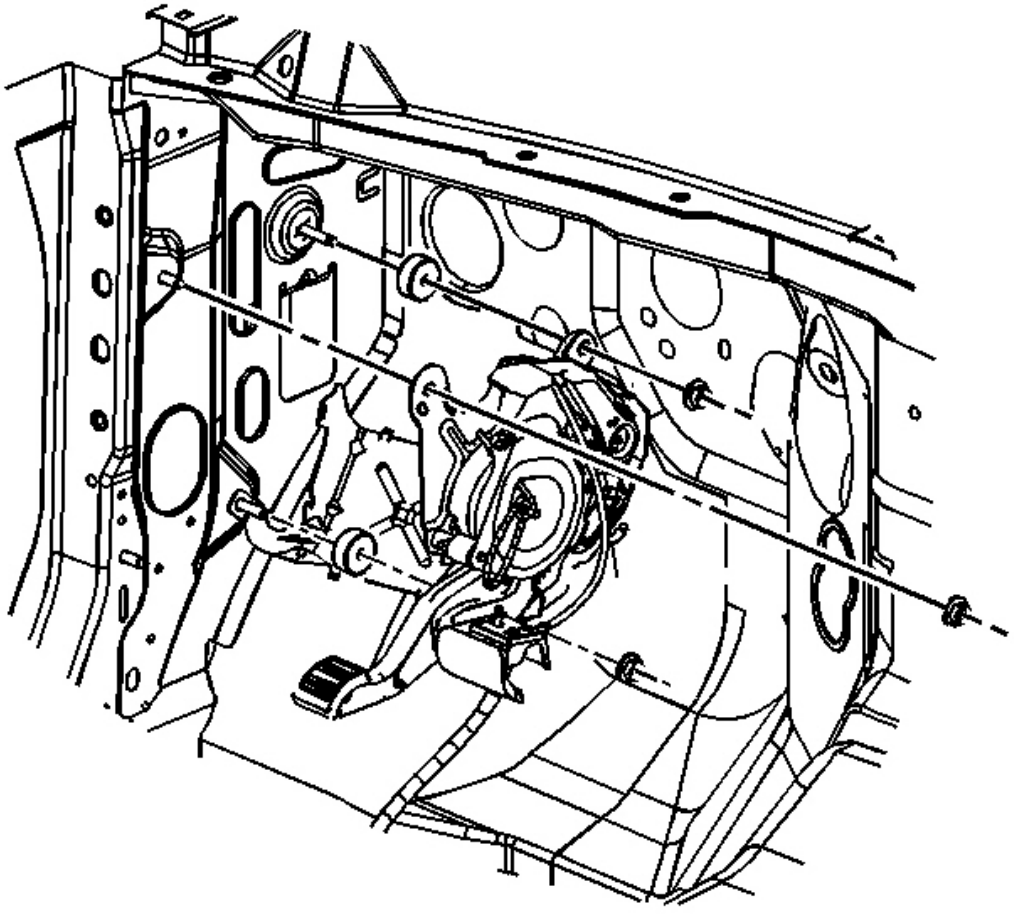


Fig. 11: Park Brake Lever Mounting Nuts
Courtesy of GENERAL MOTORS CORP.

7. Remove the park brake lever mounting nuts.

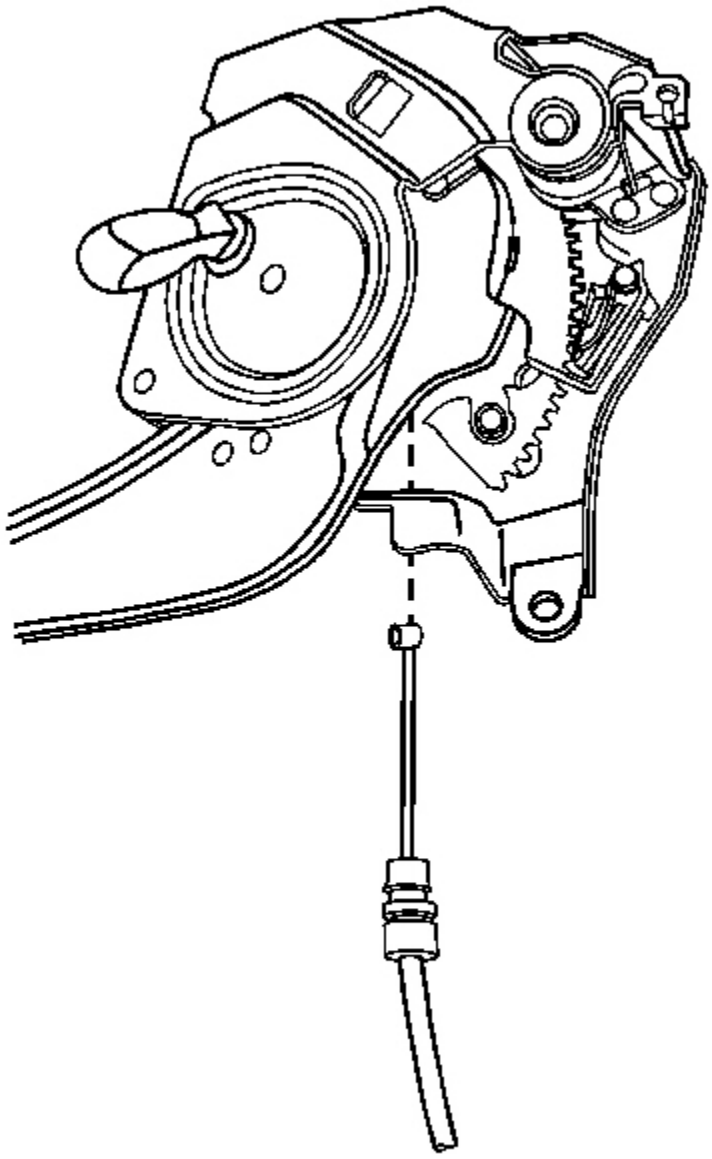


Fig. 12: Front Park Brake Cable & Park Brake Lever
Courtesy of GENERAL MOTORS CORP.

8. Disconnect the front park brake cable from the park brake lever.
9. Remove the park brake lever.

Installation Procedure

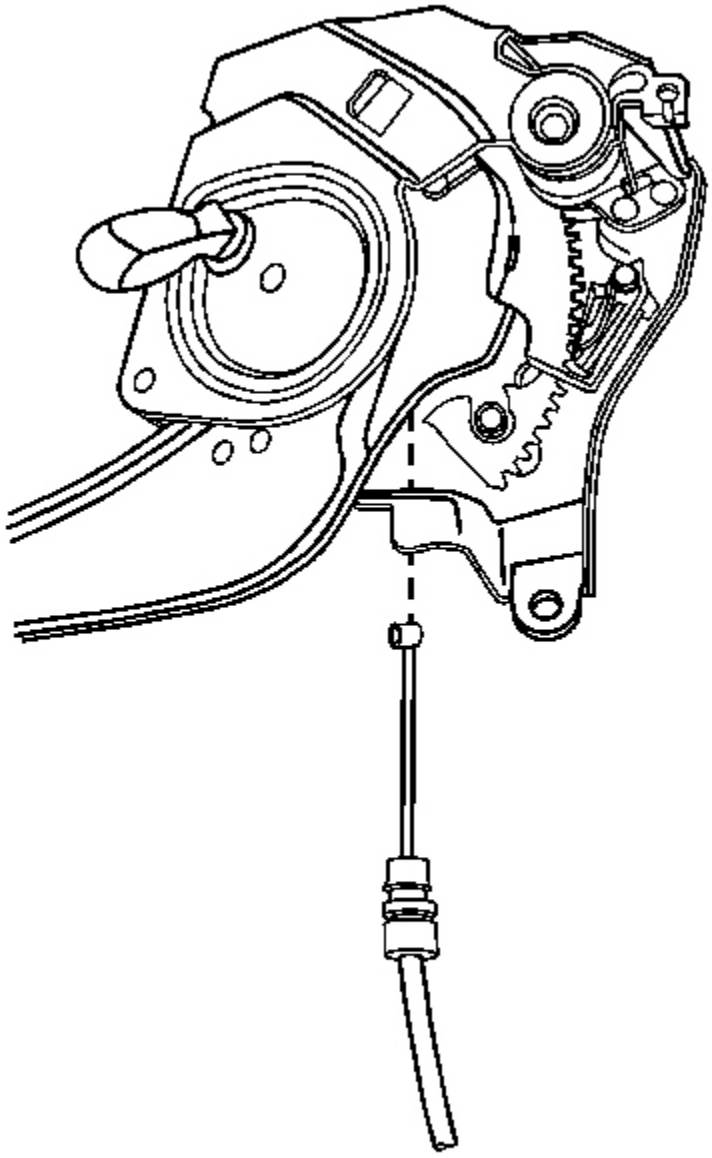


Fig. 13: Front Park Brake Cable & Park Brake Lever
Courtesy of GENERAL MOTORS CORP.

1. Connect the front park brake cable to the park brake lever.

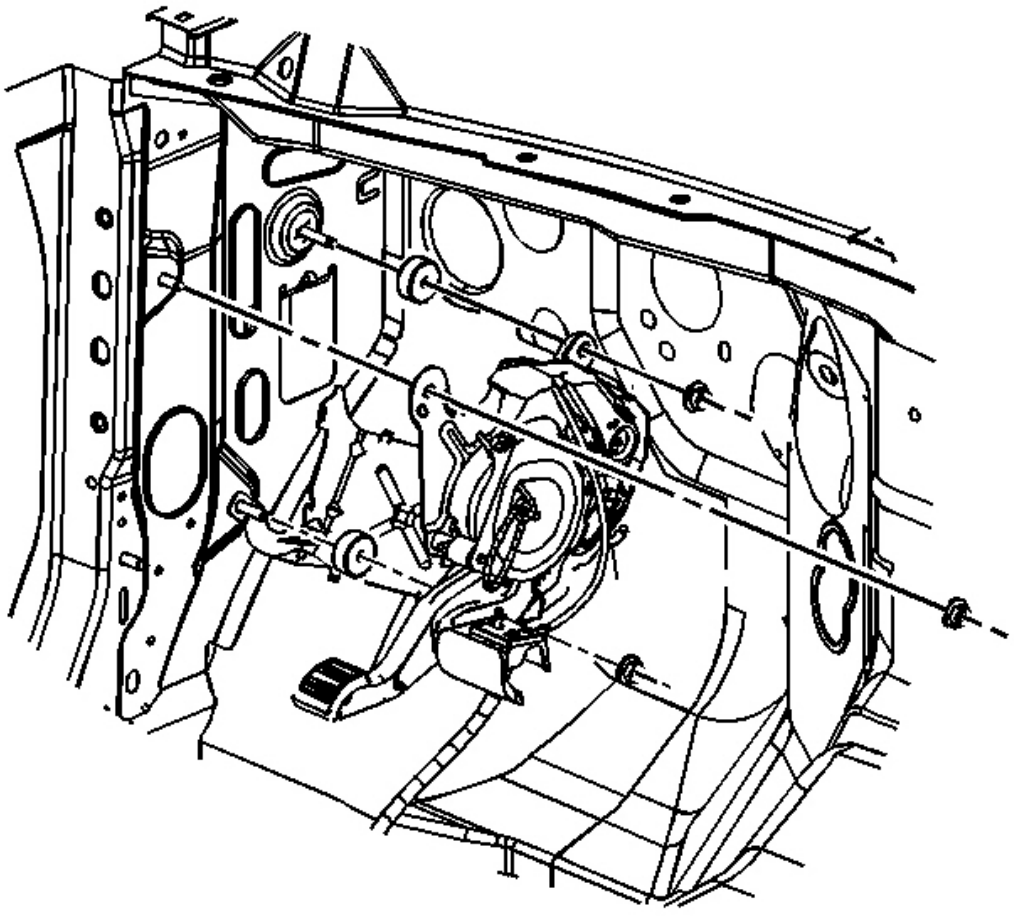


Fig. 14: Park Brake Lever Mounting Nuts
Courtesy of GENERAL MOTORS CORP.

2. Install the park brake lever.

NOTE: Refer to Fastener Notice in Cautions and Notices.

3. Install the park brake lever mounting nuts.

Tighten: Tighten the nuts to 25 N.m (18 lb ft).

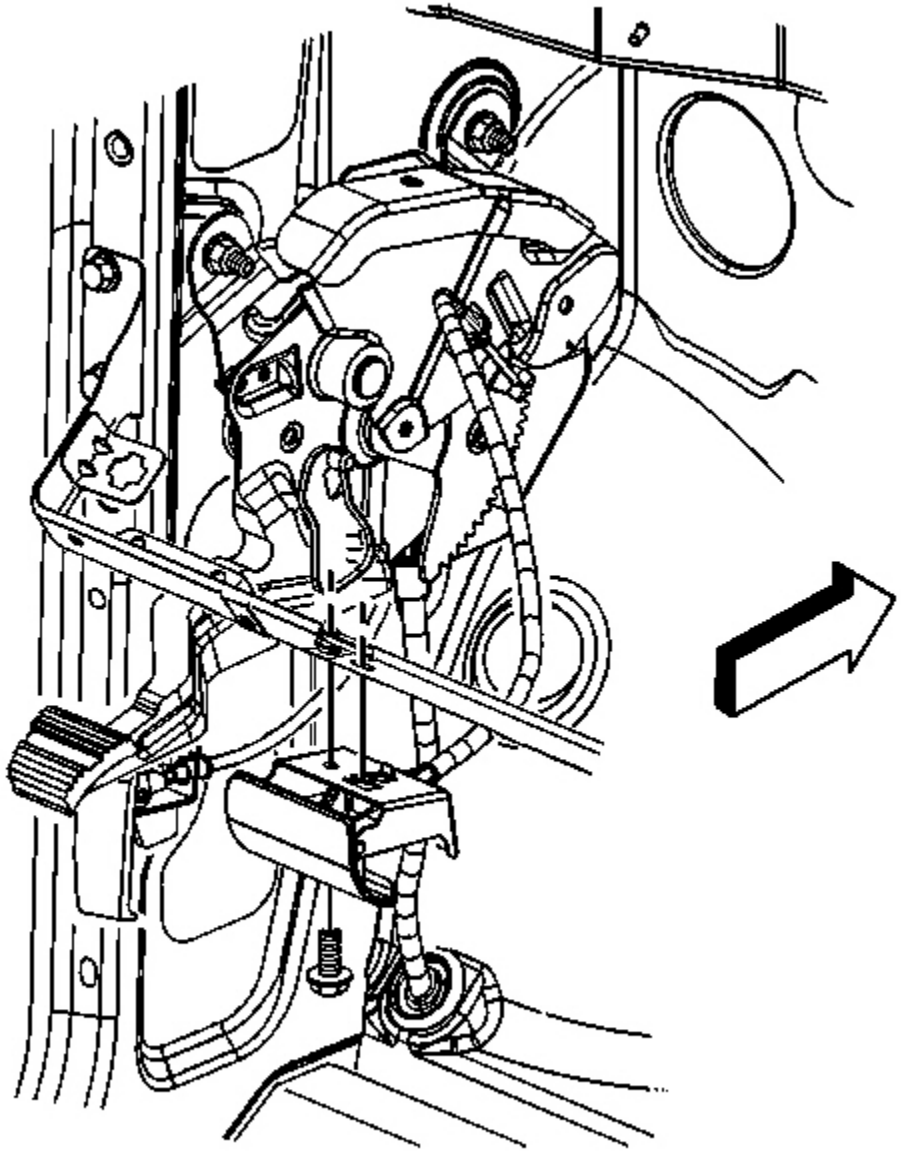


Fig. 15: Park Brake Release Lever Handle & Bolt
Courtesy of GENERAL MOTORS CORP.

4. Connect the park brake release cable to the park brake lever.

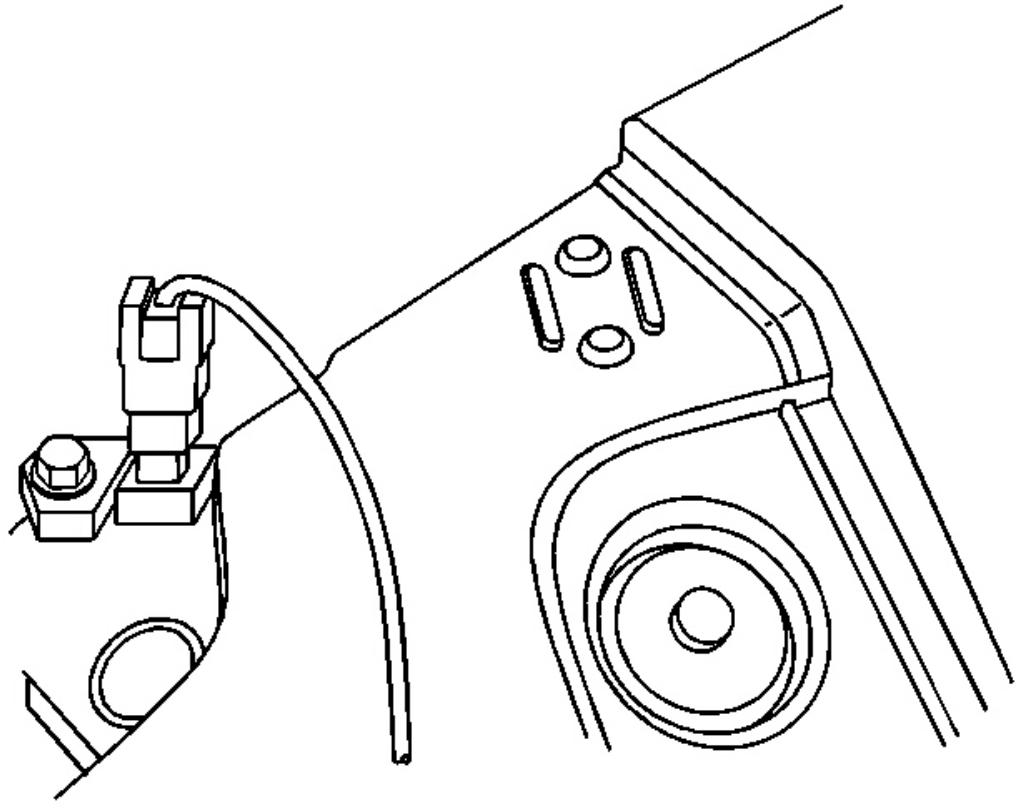


Fig. 16: Park Brake Warning Lamp Connection
Courtesy of GENERAL MOTORS CORP.

5. Connect the park brake warning lamp connector.
6. Install the MID-Bussed Electrical Center bracket.
7. Install the left side hinge pillar panel. Refer to **Trim Replacement - Hinge Pillar** in Interior Trim.
8. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnect/Connect Procedure (Single Battery)** in Engine Electrical.
9. Enable the park brake cable automatic adjuster. Refer to **Enabling the Park Brake Cable Automatic Adjuster** .

PARK BRAKE WARNING LAMP SWITCH REPLACEMENT

Removal Procedure

CAUTION: Refer to Battery Disconnect Caution in Cautions and Notices.

1. Disconnect the negative battery cable. Refer to **Battery Negative Cable Disconnect/Connect Procedure (Single Battery)** in Engine Electrical.
2. Remove the MID-Bussed Electrical Center from the bracket.

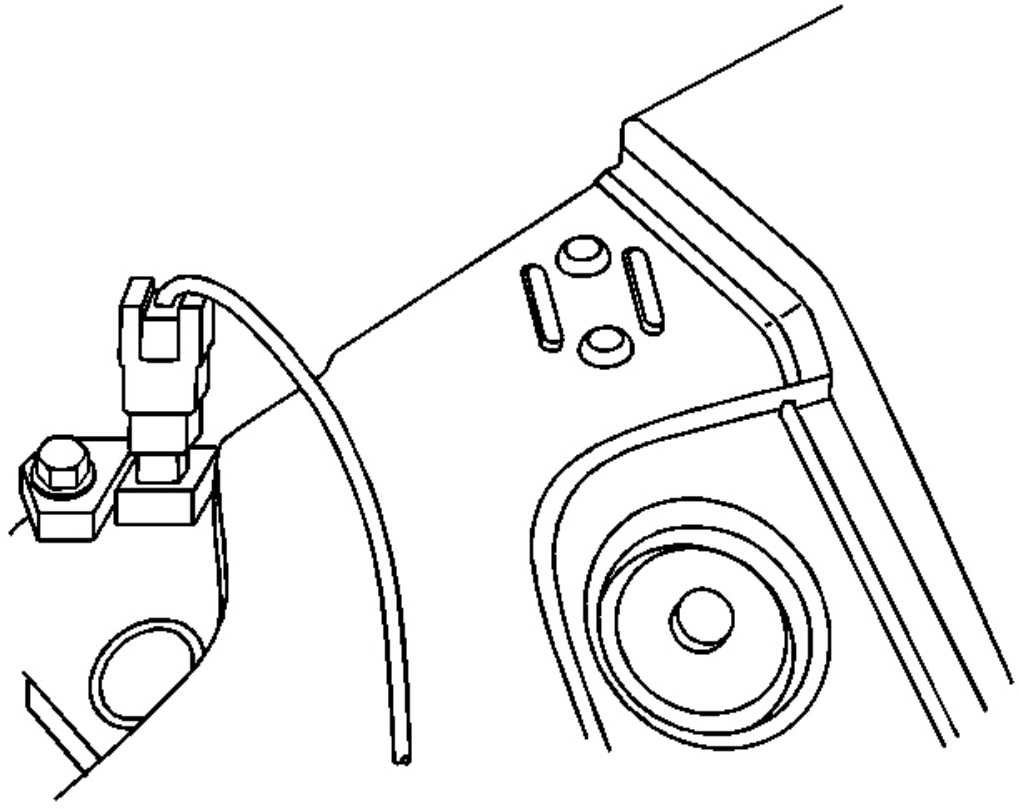


Fig. 17: Park Brake Warning Lamp Connection
Courtesy of GENERAL MOTORS CORP.

3. Disconnect the park brake warning lamp switch connector.

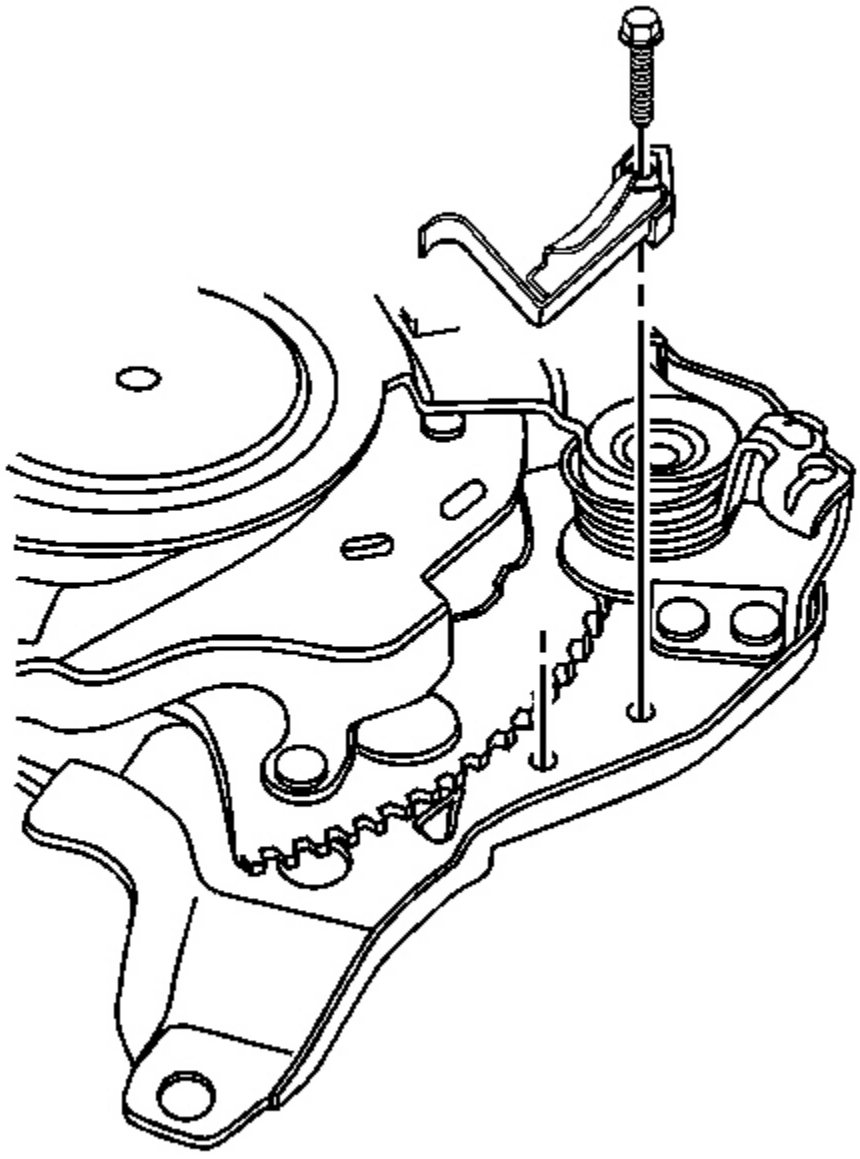


Fig. 18: Park Brake Warning Lamp Switch
Courtesy of GENERAL MOTORS CORP.

4. Remove the park brake warning lamp switch mounting bolt.
5. Remove the park brake warning lamp switch.

Installation Procedure

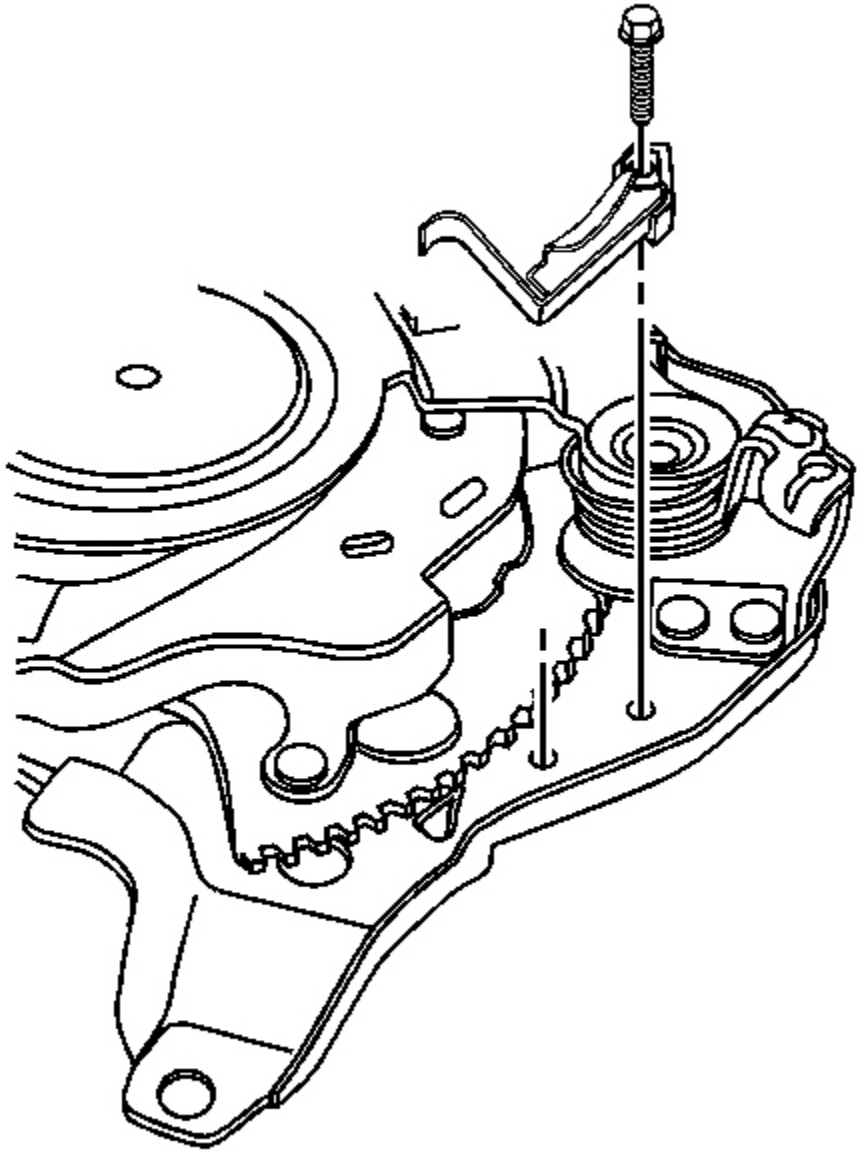


Fig. 19: Park Brake Warning Lamp Switch
Courtesy of GENERAL MOTORS CORP.

1. Install the park brake warning lamp switch.

NOTE: Refer to Fastener Notice in Cautions and Notices.

2. Install the park brake warning lamp switch mounting bolt.

   Tighten: Tighten the bolt to 3 N.m (25 lb in).

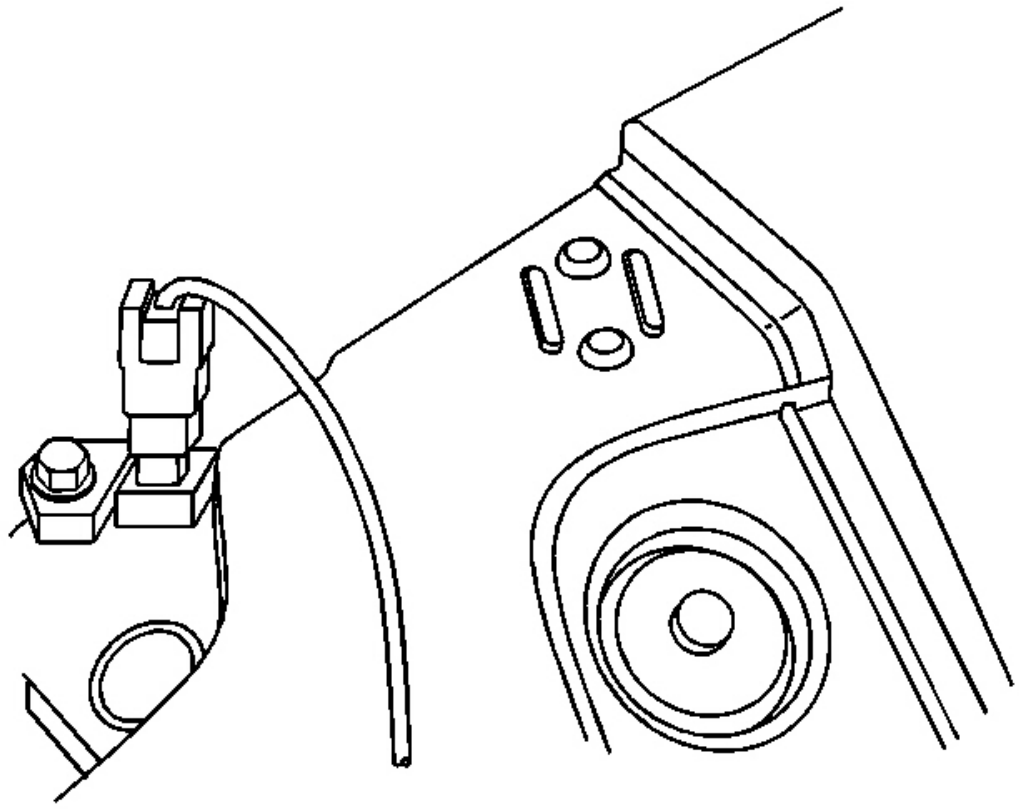


Fig. 20: Park Brake Warning Lamp Connection
Courtesy of GENERAL MOTORS CORP.

3. Connect the park brake warning lamp switch connector.
4. Install the MID-Bussed Electrical Center bracket.
5. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnect/Connect Procedure (Single Battery)** in Engine Electrical.

PARK BRAKE CABLE REPLACEMENT - FRONT

Removal Procedure

1. Disable the park brake cable automatic adjuster. Refer to **Disabling the Park Brake Cable Automatic Adjuster** In Park Brake.
2. Remove the park brake pedal. Refer to **Park Brake Pedal Assembly Replacement** .

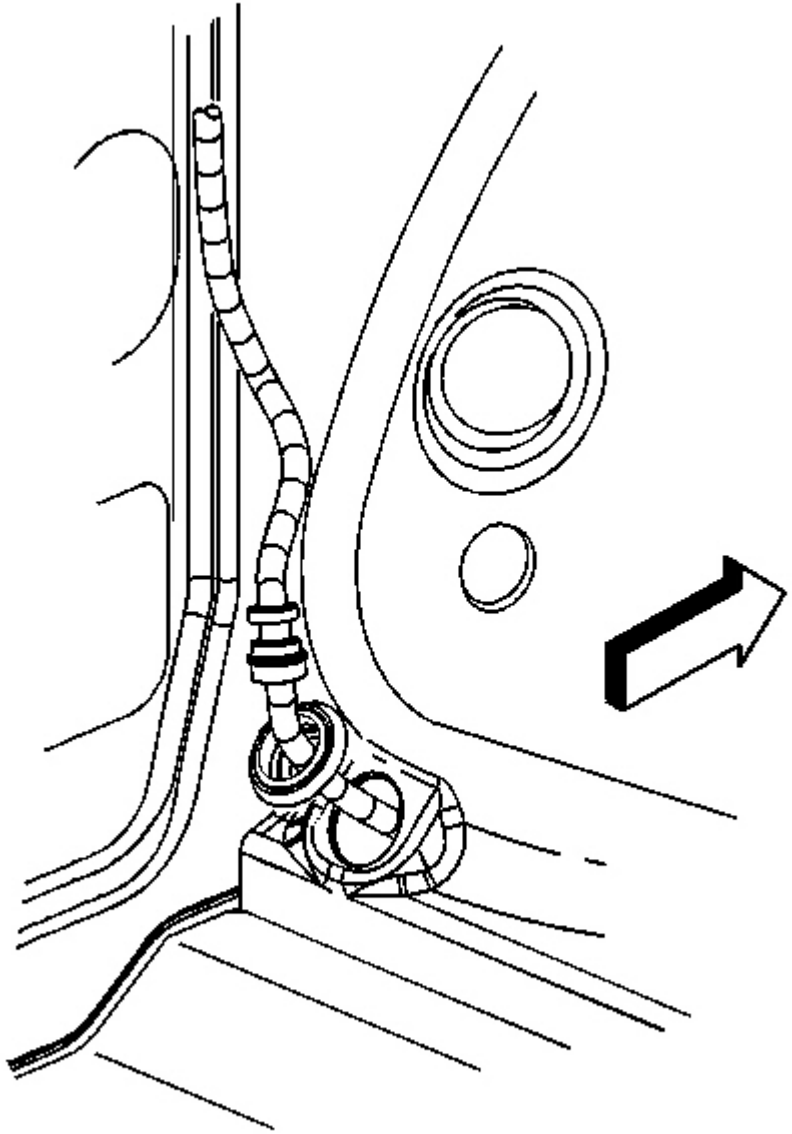


Fig. 21: Access Cable Grommet
Courtesy of GENERAL MOTORS CORP.

3. Roll the carpet back to access cable grommet.
4. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

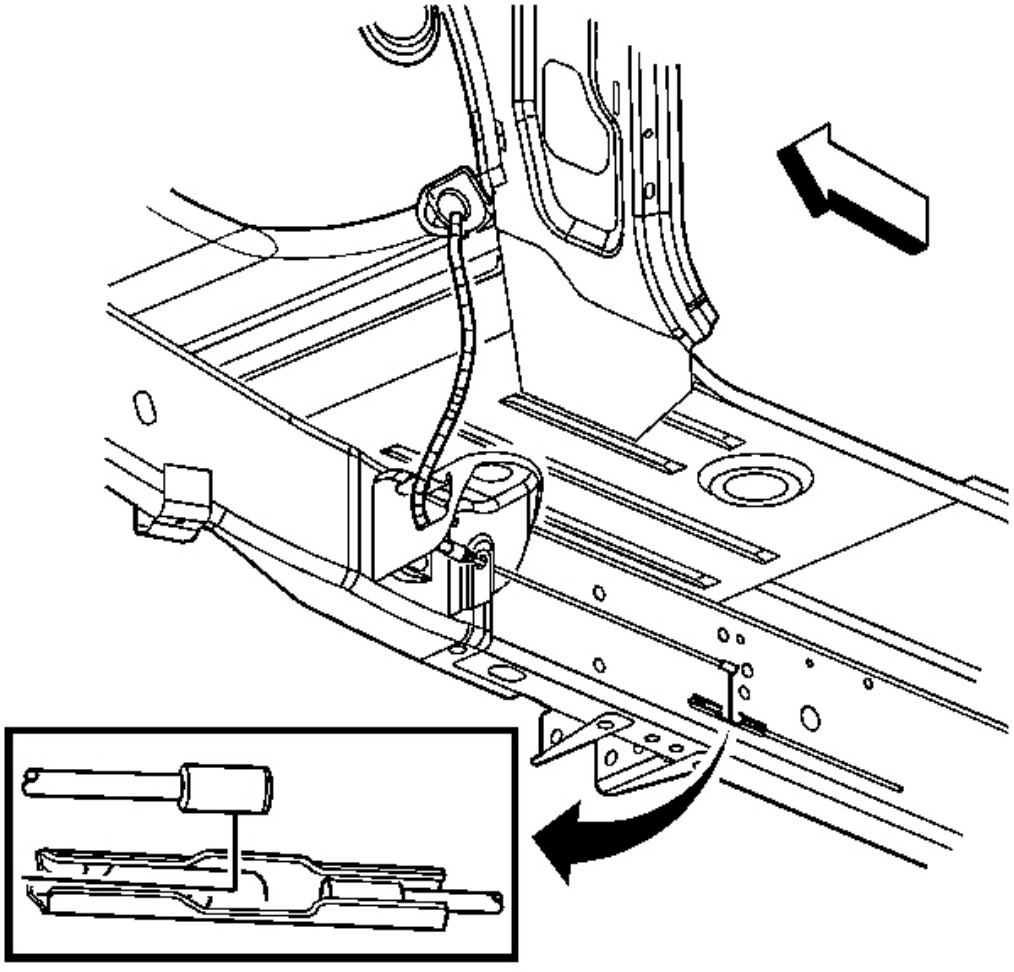


Fig. 22: Front/Intermediate Park Brake Cable
Courtesy of GENERAL MOTORS CORP.

5. Disengage the grommet and the cable from the floor pan.
6. Disconnect the front cable from the rear cable.
7. Remove the cable from the body mount by depressing the retaining tabs.
8. Remove the cable.

Installation Procedure

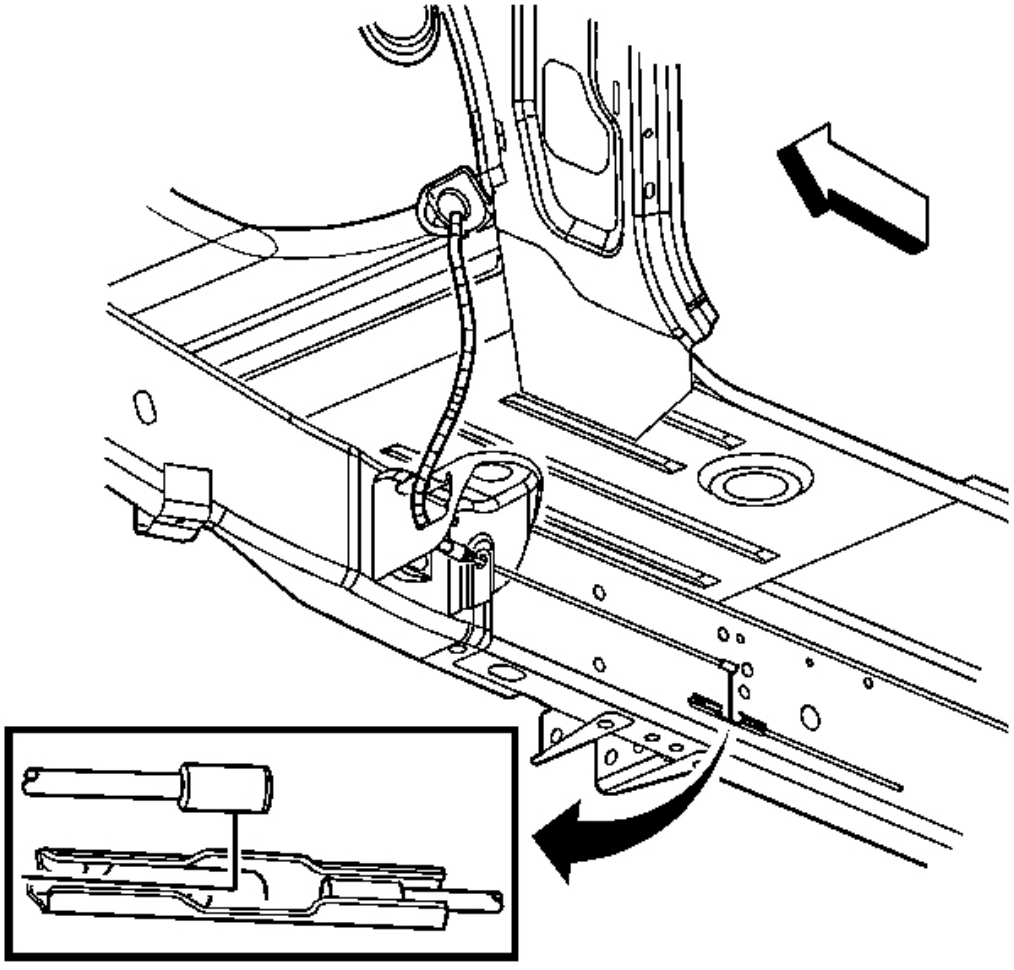


Fig. 23: Front/Intermediate Park Brake Cable
Courtesy of GENERAL MOTORS CORP.

1. Install the cable.
2. Snap the retainer tabs into the body mount.
3. Connect the front cable to the rear cable.
4. Route the cable in through the floor pan and engage the grommet.
5. Remove the safety stands.
6. Lower the vehicle.

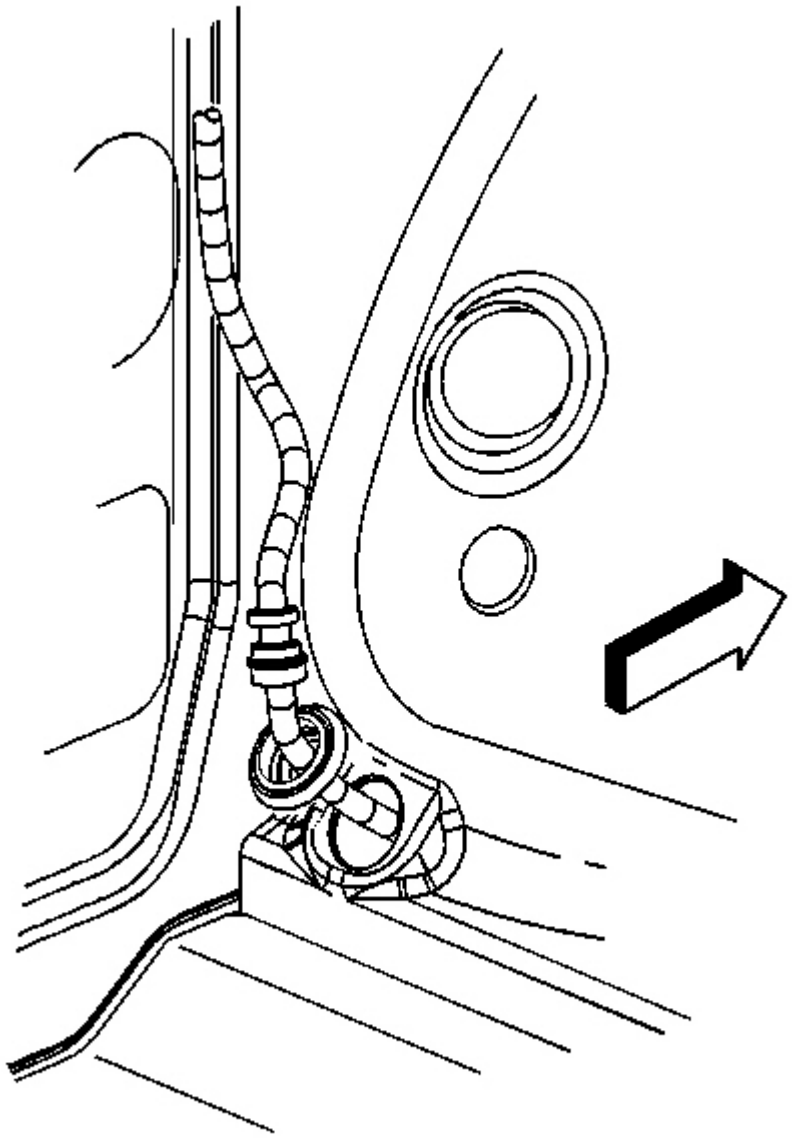


Fig. 24: Access Cable Grommet
Courtesy of GENERAL MOTORS CORP.

7. Roll the carpet into place.
8. Install the park brake pedal. Refer to **Park Brake Pedal Assembly Replacement** .
9. Enable the park brake cable automatic adjuster. Refer to **Enabling the Park Brake Cable Automatic Adjuster** in Park Brake.

PARK BRAKE CABLE REPLACEMENT - LEFT REAR

Removal Procedure

1. Disable the park brake cable automatic adjuster. Refer to **Disabling the Park Brake Cable Automatic Adjuster** .
2. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

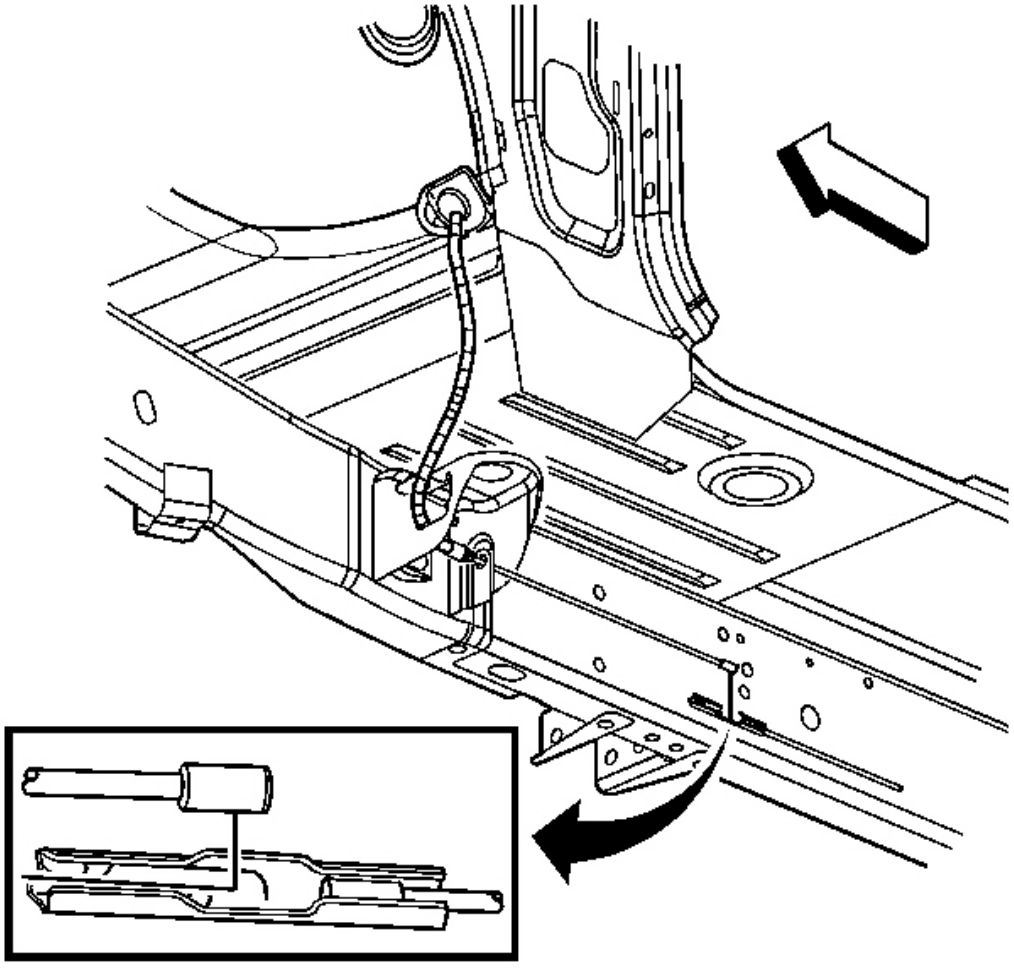


Fig. 25: Front/Intermediate Park Brake Cable
Courtesy of GENERAL MOTORS CORP.

3. Disconnect the left rear cable from the front cable.

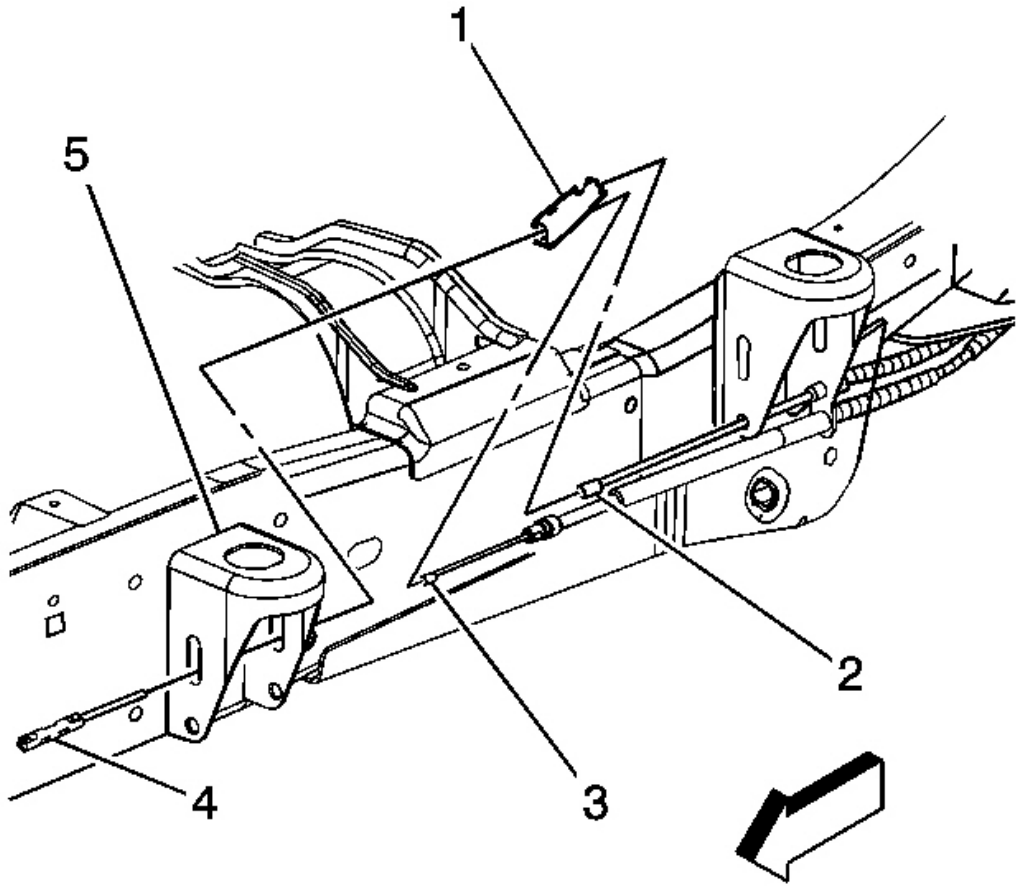


Fig. 26: Left Rear Cable & Equalizer
Courtesy of GENERAL MOTORS CORP.

4. Remove the left rear cable (4) from the equalizer (1) by depressing the locking tabs.

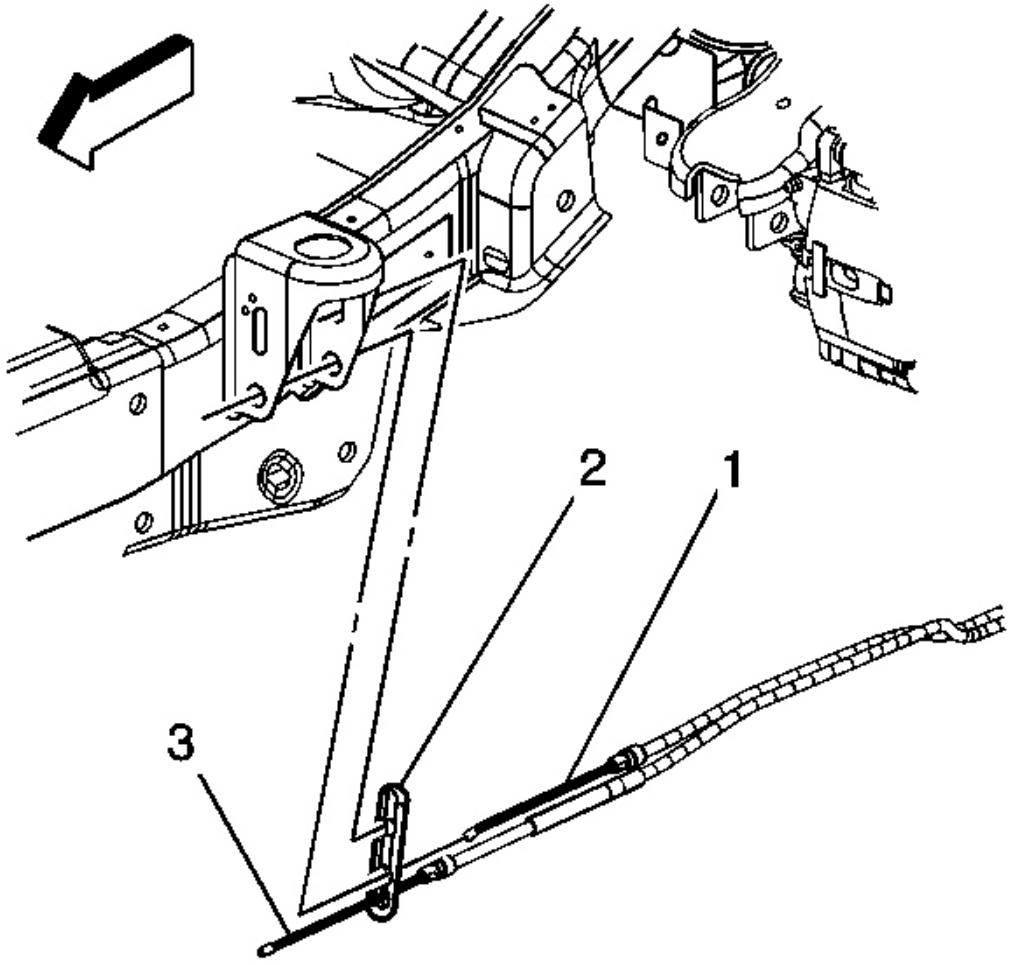


Fig. 27: Left Rear Cable & Cable Support
Courtesy of GENERAL MOTORS CORP.

5. Remove the left rear cable (3) from the cable support (2).

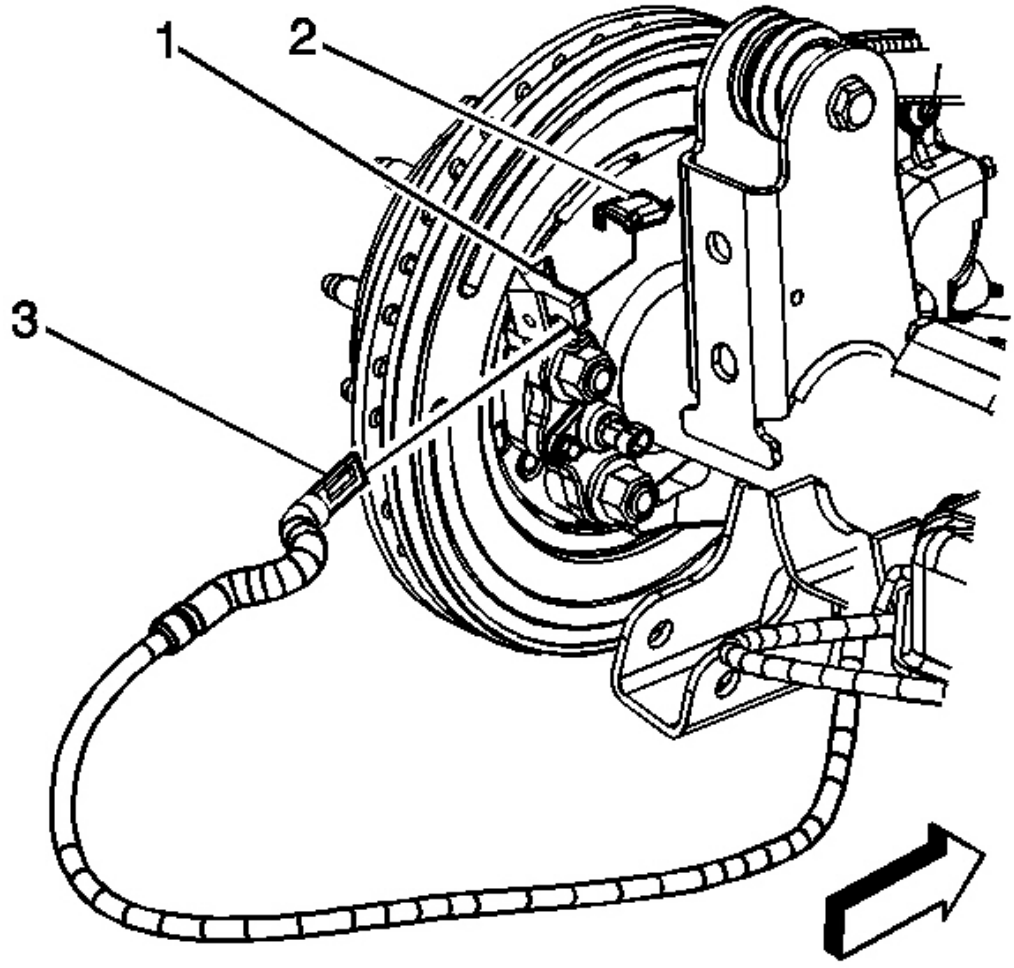


Fig. 28: Cable, Lever & Backing Plate
Courtesy of GENERAL MOTORS CORP.

6. Remove the cable (3) from the backing plate (1) by compressing the spring to access and depress the locking tabs, pull the cable out of the backing plate, and routing the cable through the slot in the backing plate.
7. Remove the cable (3) from the lever (2).

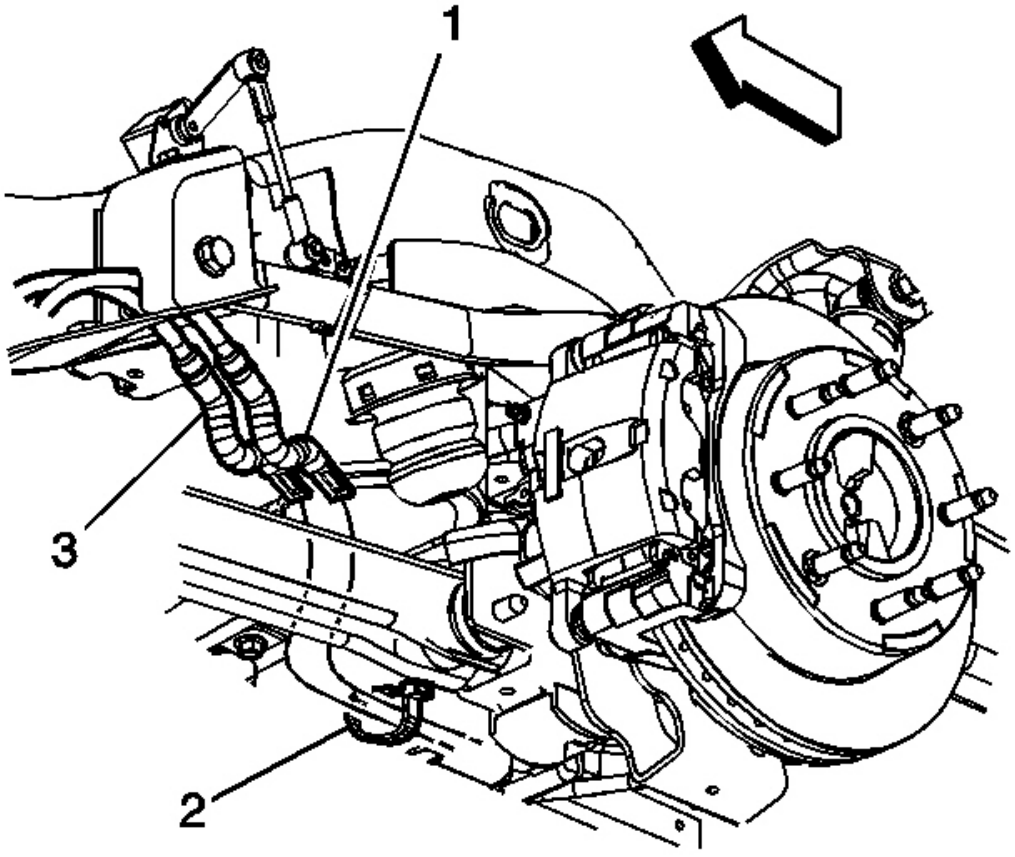


Fig. 29: Left Rear Park Brake Cable
Courtesy of GENERAL MOTORS CORP.

8. Remove the left rear cable (1) from the cable guide (2).
9. Remove the cable from the vehicle.

Installation Procedure

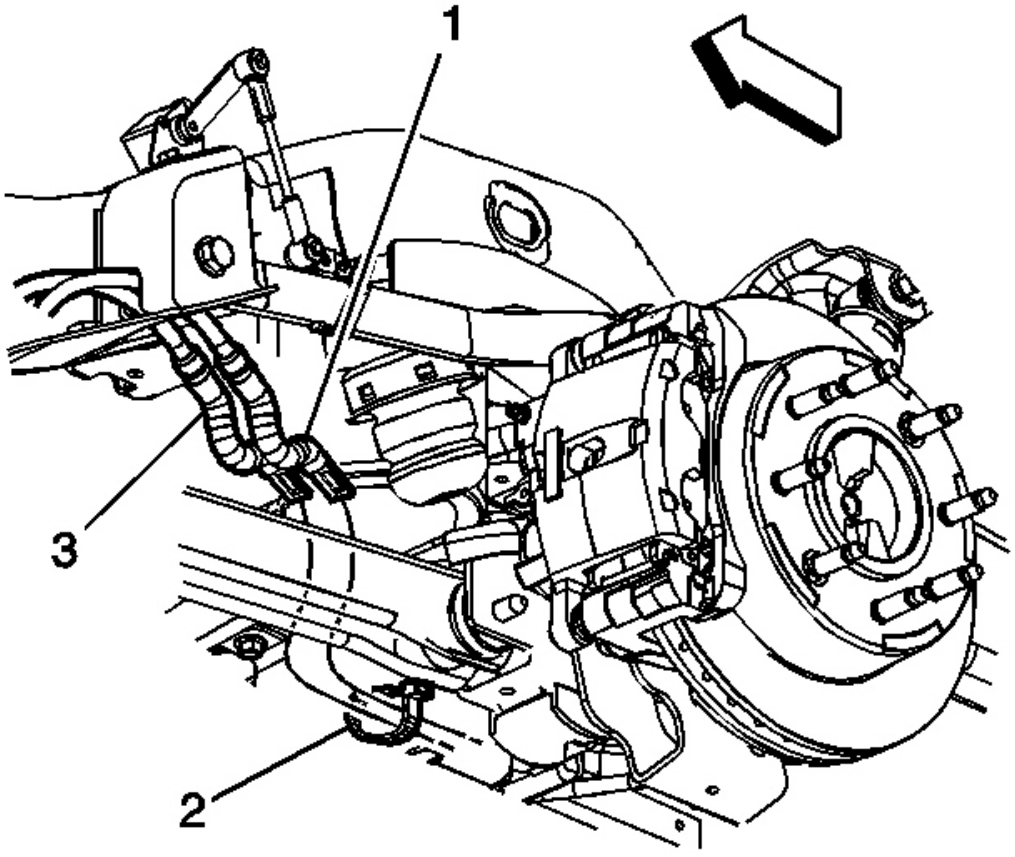


Fig. 30: Left Rear Park Brake Cable
Courtesy of GENERAL MOTORS CORP.

1. Install the left rear cable taking care to correctly route the cable (1) through the cable guide (2).

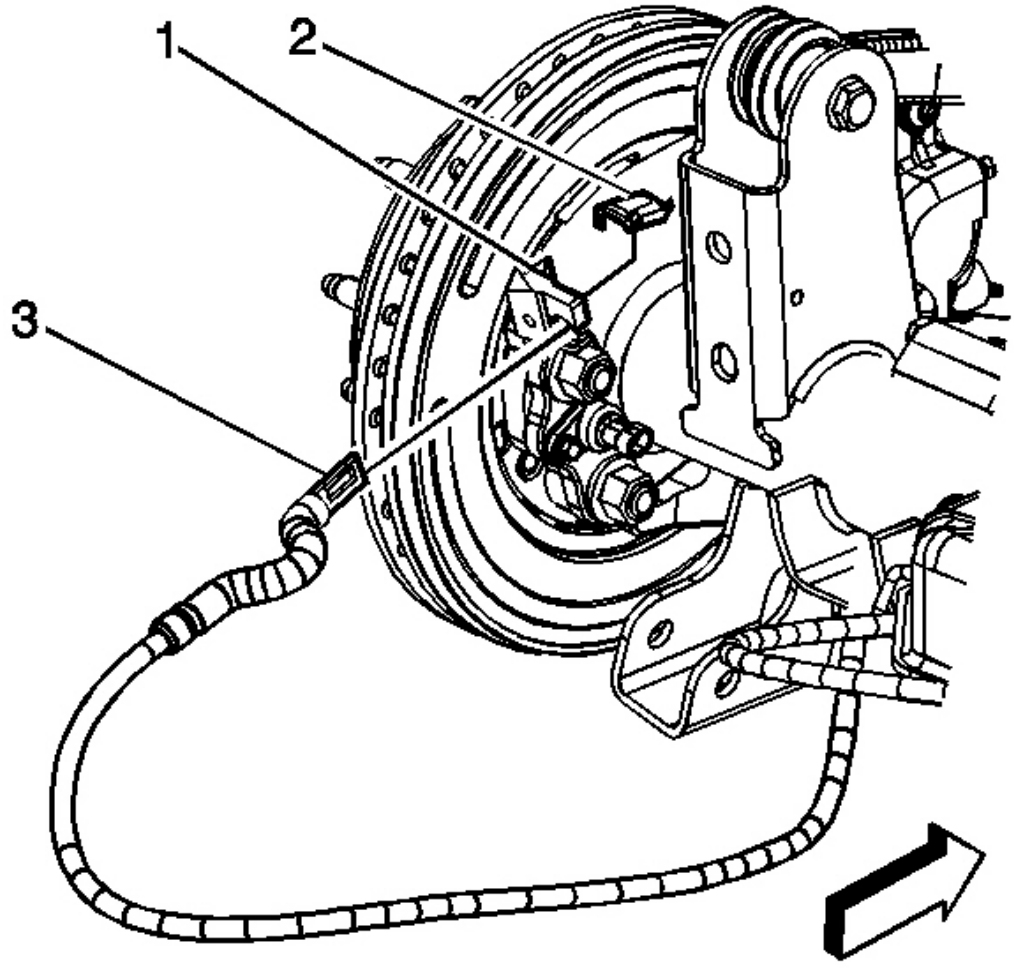


Fig. 31: Cable, Lever & Backing Plate
Courtesy of GENERAL MOTORS CORP.

2. Install the cable (3) to the lever (2).
3. install the cable (3) to the backing plate (1) by compressing the spring, routing the cable through the slot in the backing plate and pressing the cable into the backing plate until the locking tabs snap into place.

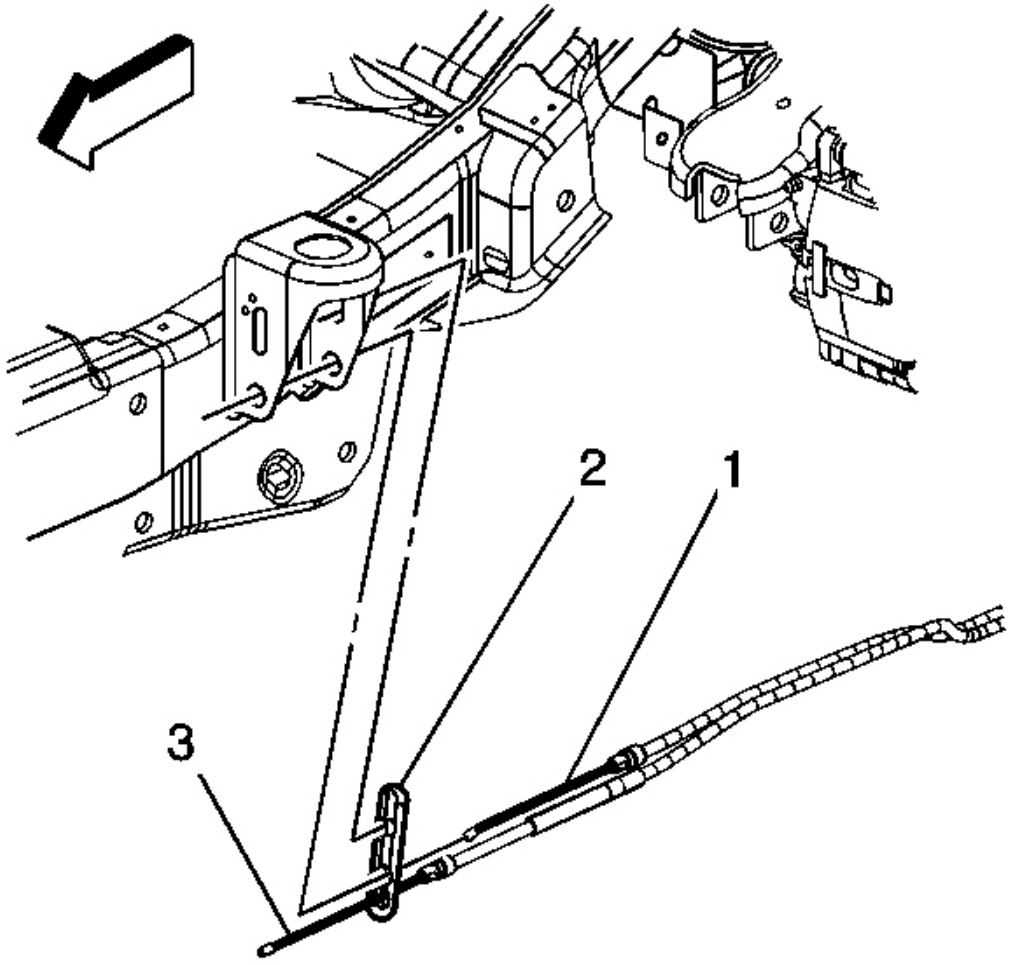


Fig. 32: Left Rear Cable & Cable Support
Courtesy of GENERAL MOTORS CORP.

4. Install the left rear cable (3) to the cable support (2).

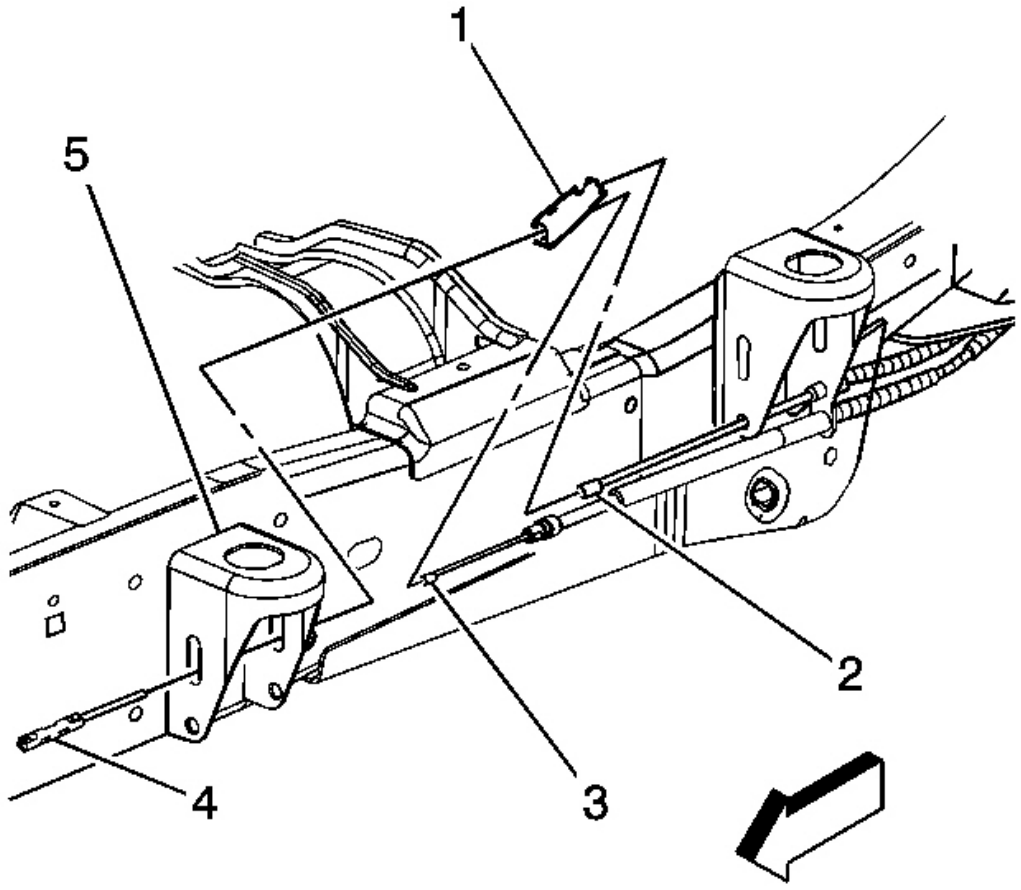


Fig. 33: Left Rear Cable & Equalizer
Courtesy of GENERAL MOTORS CORP.

5. Install the left rear cable (4) to the equalizer (1) until the locking tabs snap into place.

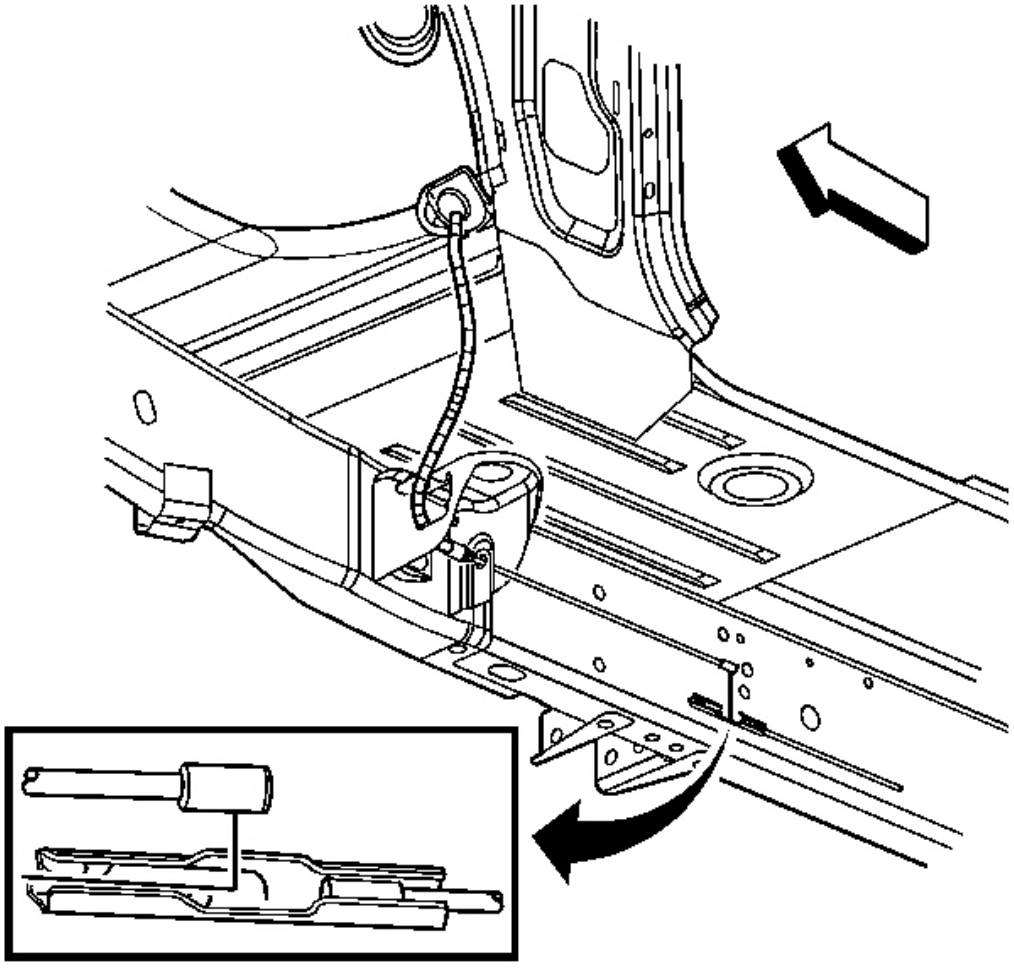


Fig. 34: Front/Intermediate Park Brake Cable
Courtesy of GENERAL MOTORS CORP.

6. Connect the left rear cable to the front cable.
7. Remove the safety stands.
8. Lower the vehicle.
9. Enable the park brake cable automatic adjuster. Refer to **Enabling the Park Brake Cable Automatic Adjuster** .

PARK BRAKE CABLE REPLACEMENT - RIGHT REAR

Removal Procedure

1. Disable the park brake cable automatic adjuster. Refer to **Disabling the Park Brake Cable Automatic Adjuster** .
2. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

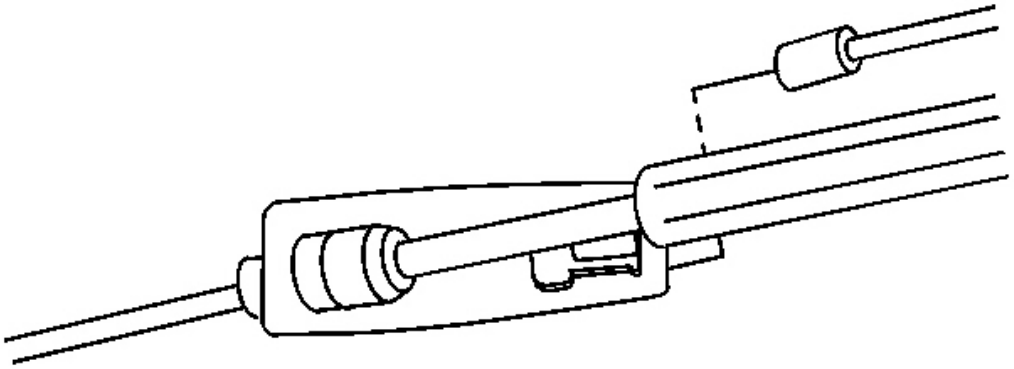


Fig. 35: Right Rear Park Brake Cable & Equalizer
Courtesy of GENERAL MOTORS CORP.

3. Disconnect the right rear cable from the equalizer.

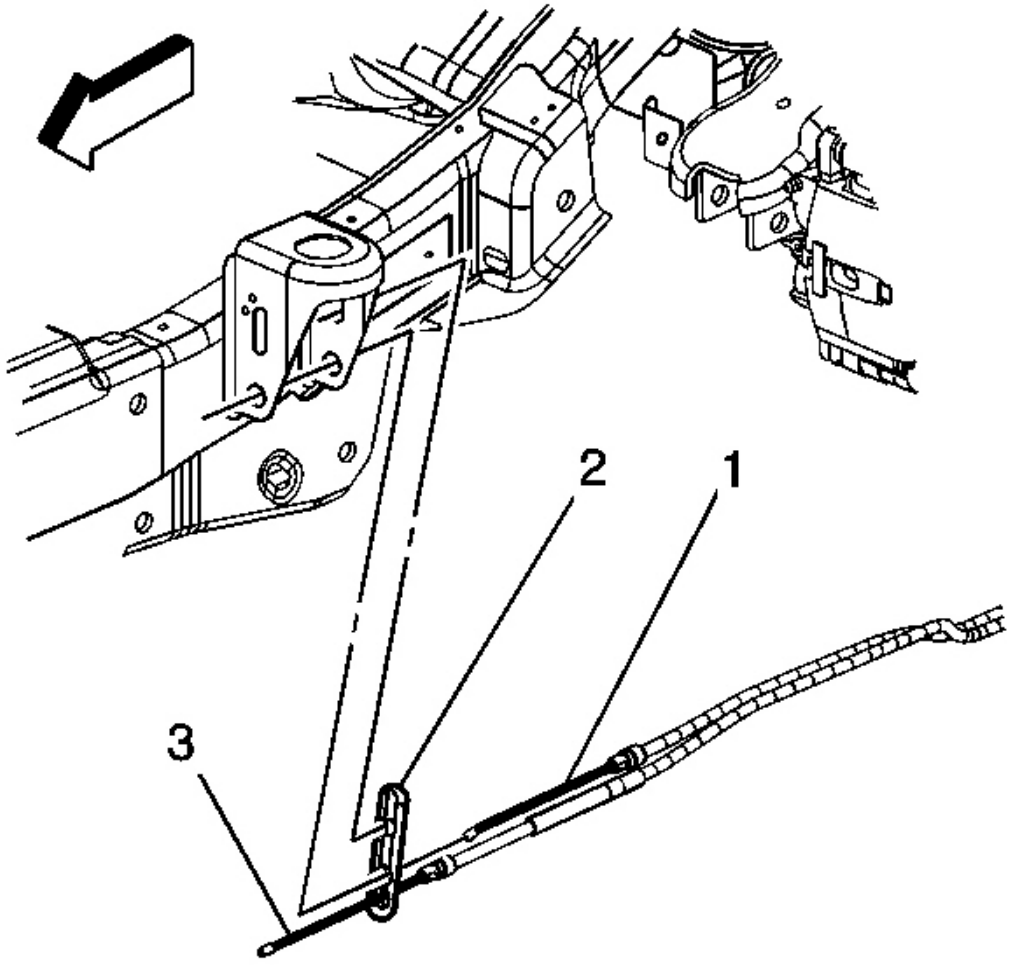


Fig. 36: Right Rear Cable & Cable Support
Courtesy of GENERAL MOTORS CORP.

4. Remove the right rear cable (1) from the cable support (2).

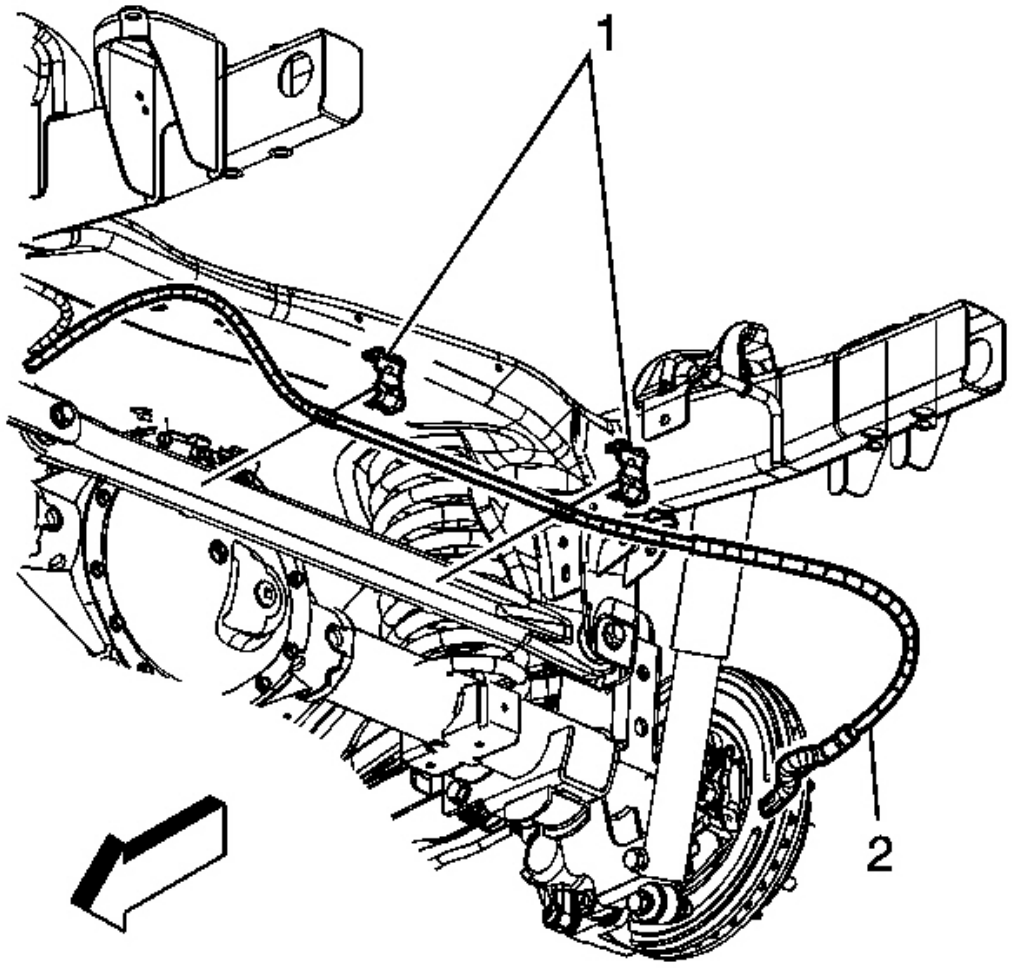


Fig. 37: Track Bar & Clips
Courtesy of GENERAL MOTORS CORP.

5. Remove the track bar clips (1) from the track bar.

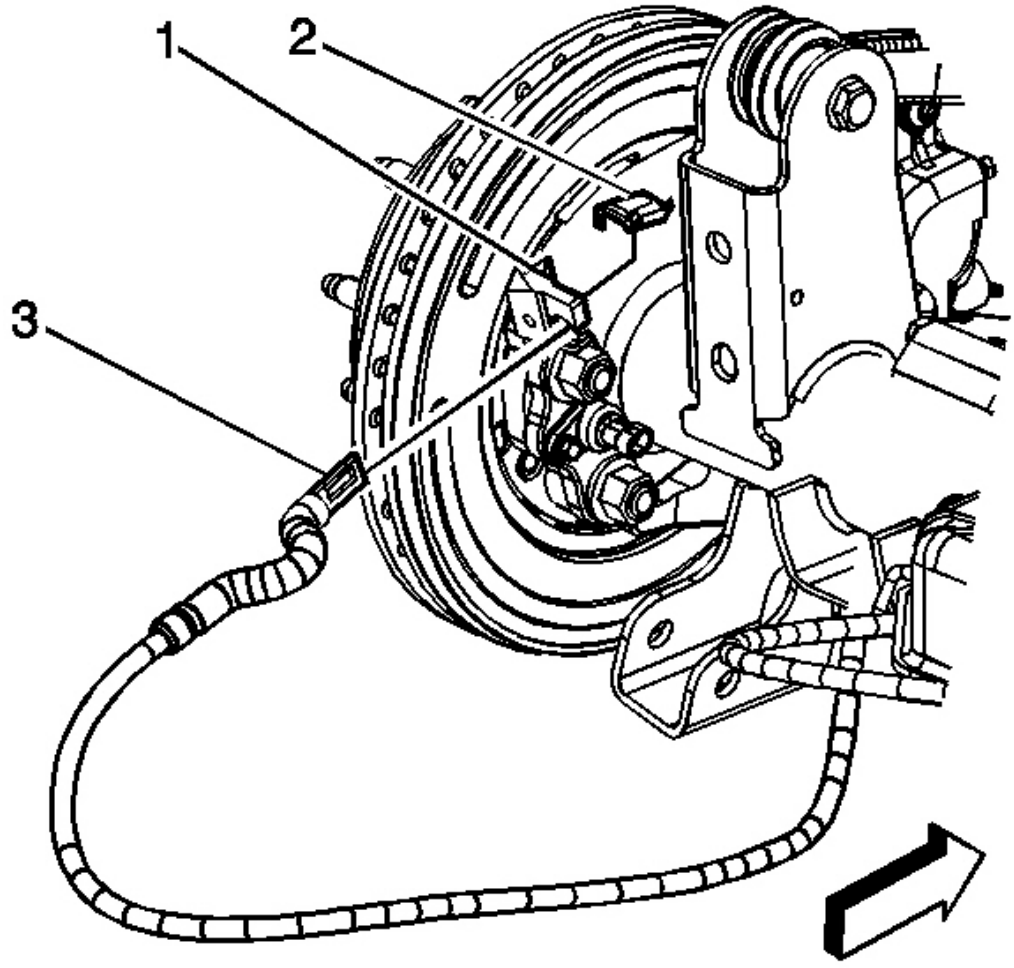


Fig. 38: Cable, Lever & Backing Plate
Courtesy of GENERAL MOTORS CORP.

6. Remove the cable (3) from the backing plate (1) by compressing the spring to access and depress the locking tabs, pull the cable out of the backing plate, and routing the cable through the slot in the backing plate.
7. Remove the cable (3) from the lever (2).

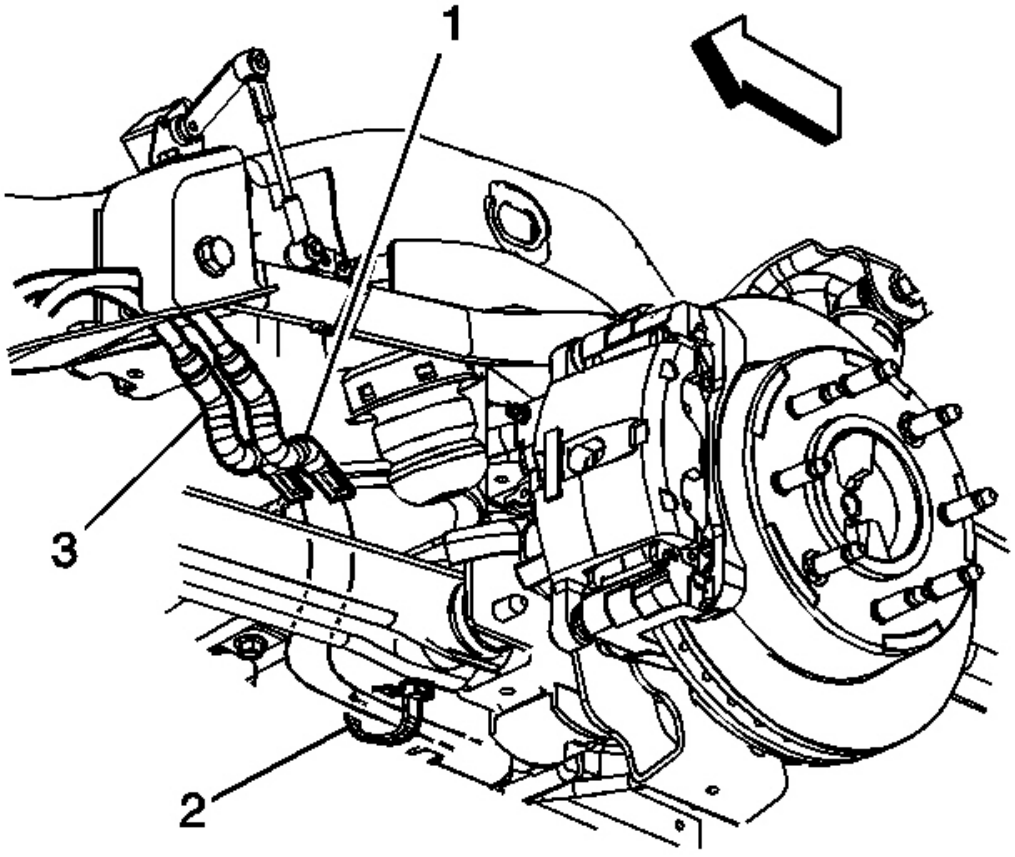


Fig. 39: Right Rear Cable & Cable Guide
Courtesy of GENERAL MOTORS CORP.

8. Remove the right rear cable (3) from the cable guide (2).
9. Remove the cable from the vehicle.

Installation Procedure

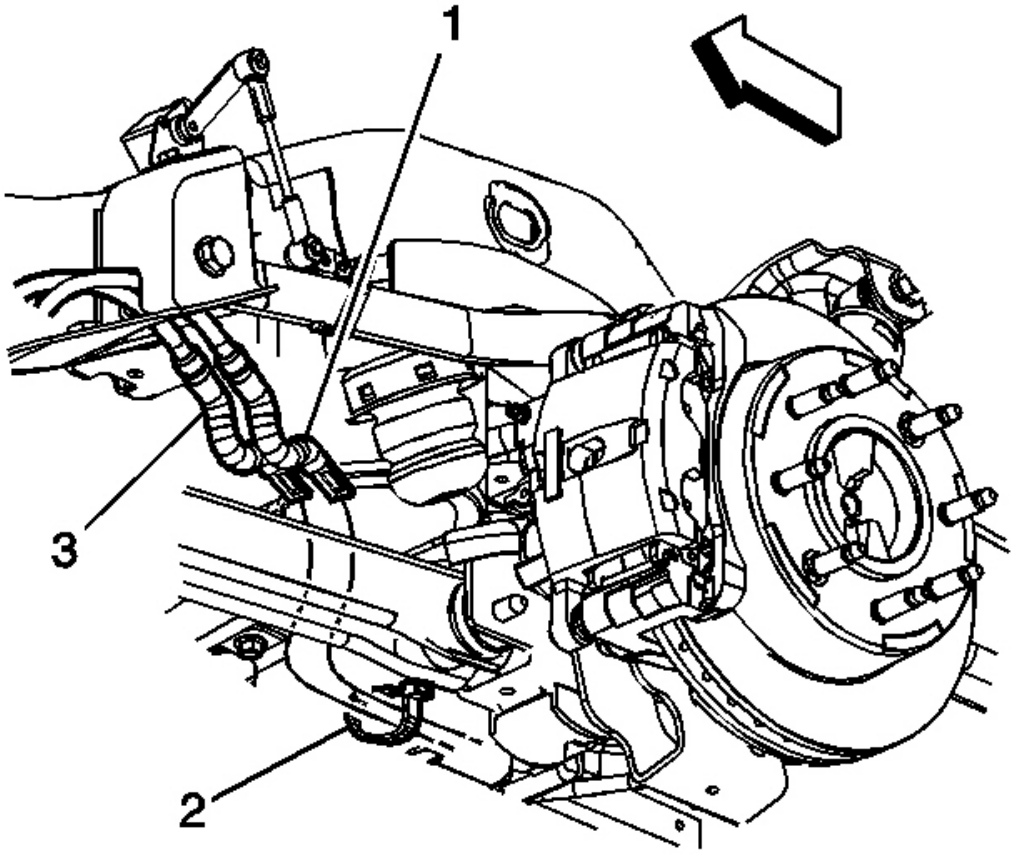


Fig. 40: Right Rear Cable & Cable Guide
Courtesy of GENERAL MOTORS CORP.

1. Install the right rear cable taking care to correctly route the cable (3) through the cable guide (2).

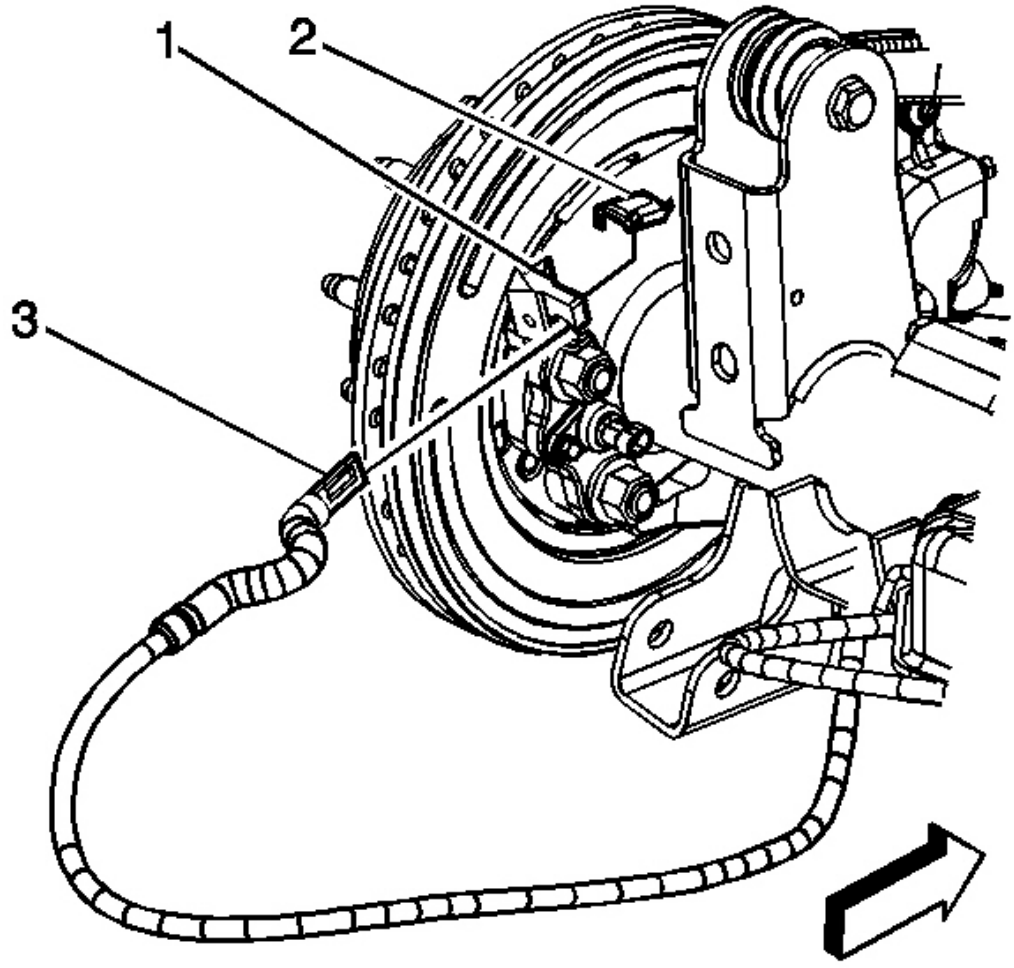


Fig. 41: Cable, Lever & Backing Plate
Courtesy of GENERAL MOTORS CORP.

2. Install the cable (3) to the lever (2).
3. install the cable (3) to the backing plate (1) by compressing the spring, routing the cable through the slot in the backing plate and pressing the cable into the backing plate until the locking tabs snap into place.

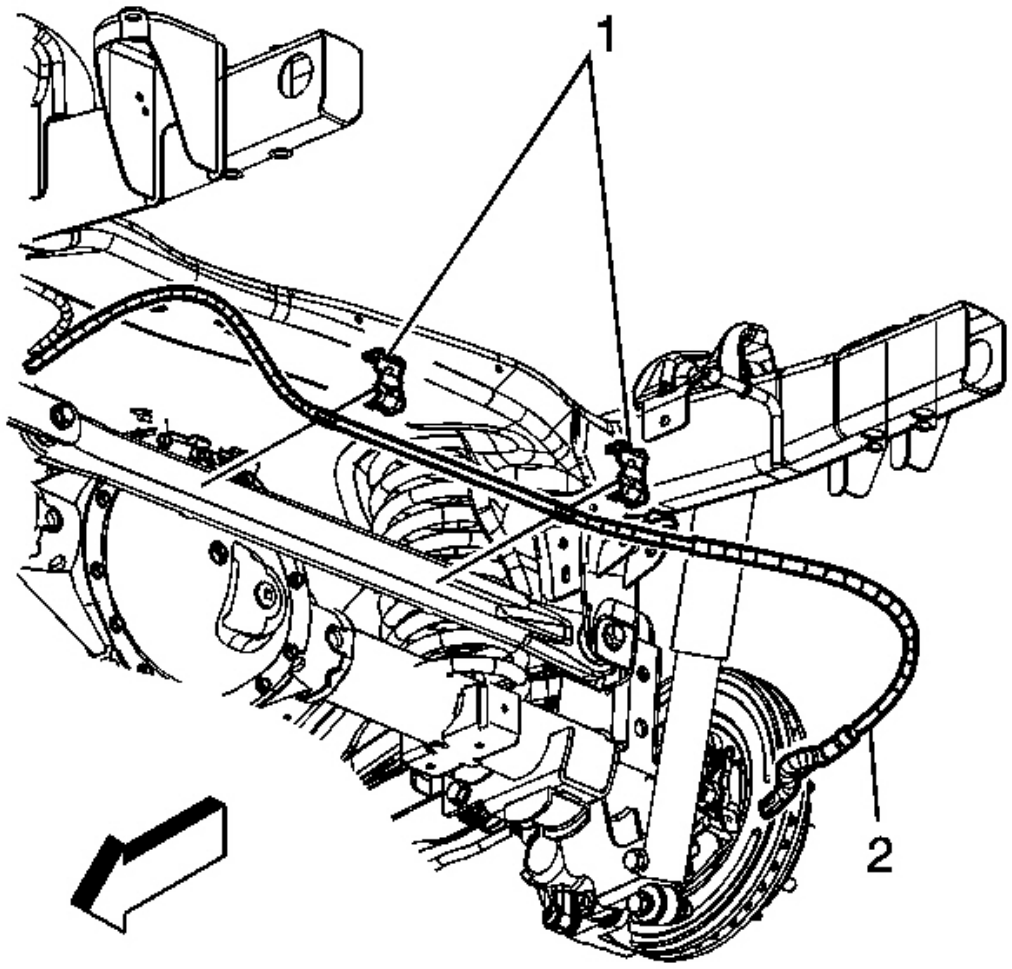


Fig. 42: Track Bar & Clips
Courtesy of GENERAL MOTORS CORP.

4. Position the right rear cable (2) and the clips (1) on the track bar.

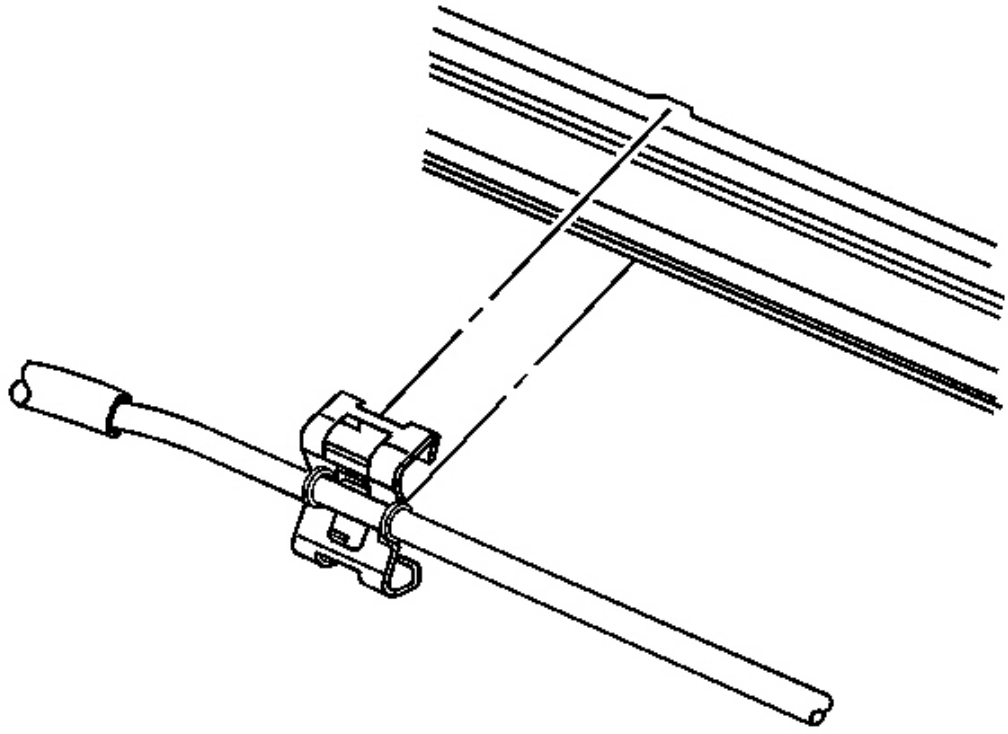


Fig. 43: Installing Track Bar Clips
Courtesy of GENERAL MOTORS CORP.

5. Install the track bar clips to the locating tabs on the track bar.

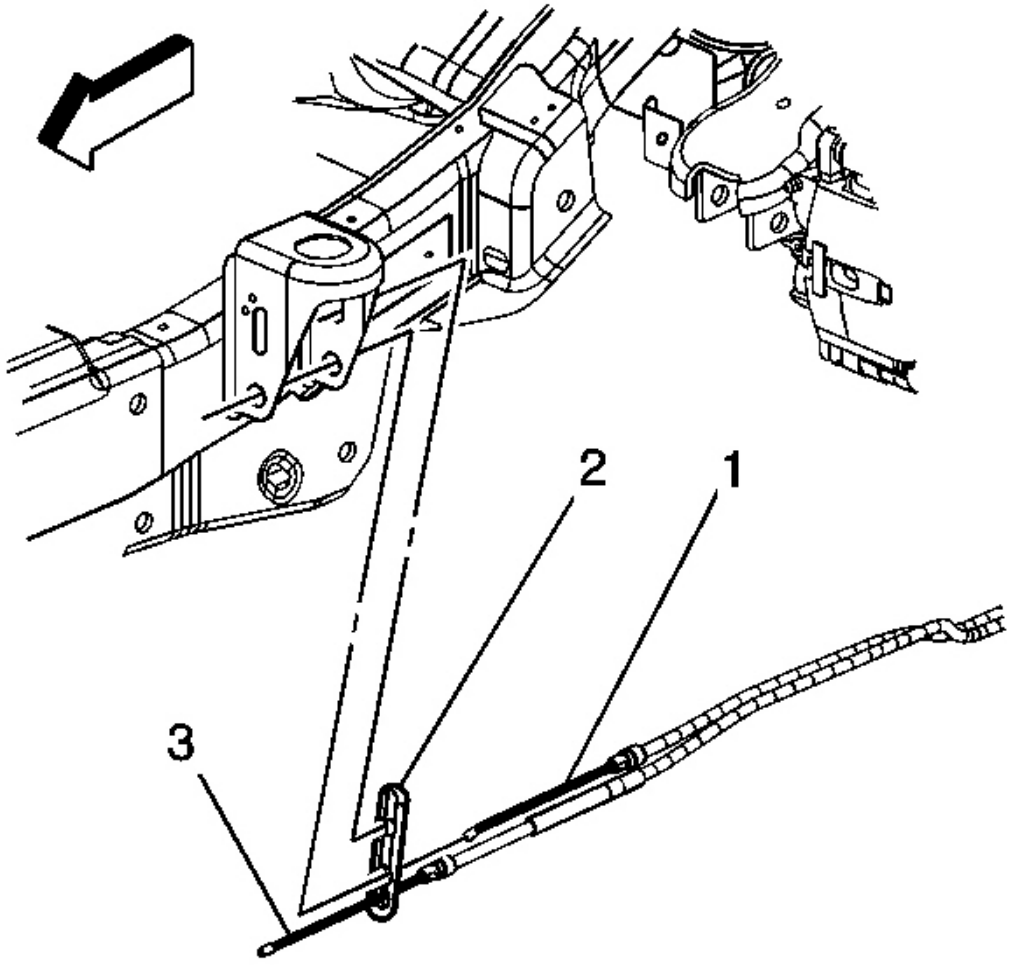


Fig. 44: Right Rear Cable & Cable Support
Courtesy of GENERAL MOTORS CORP.

6. Install the right rear cable (1) to the cable support (2).

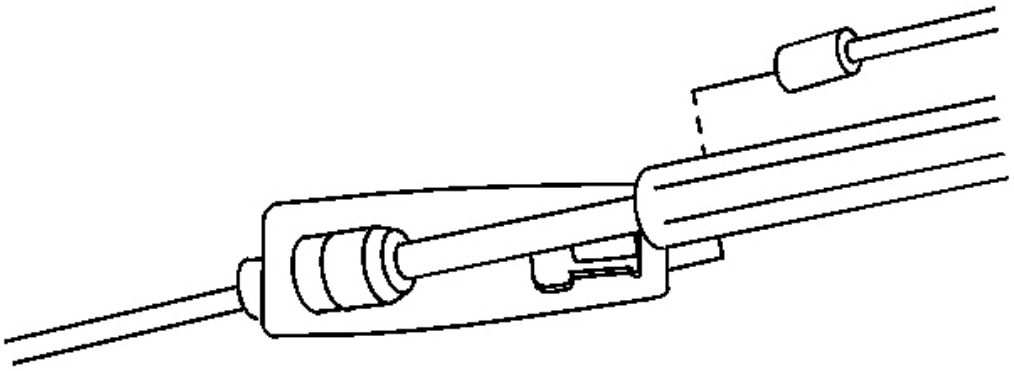


Fig. 45: Right Rear Park Brake Cable & Equalizer
Courtesy of GENERAL MOTORS CORP.

7. Install the right rear cable to the equalizer.
8. Remove the safety stands.
9. Lower the vehicle.
10. Enable the park brake cable automatic adjuster. Refer to **Enabling the Park Brake Cable Automatic Adjuster** .

PARK BRAKE CABLE GUIDE REPLACEMENT

Removal Procedure

1. Release the parking brake.
2. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

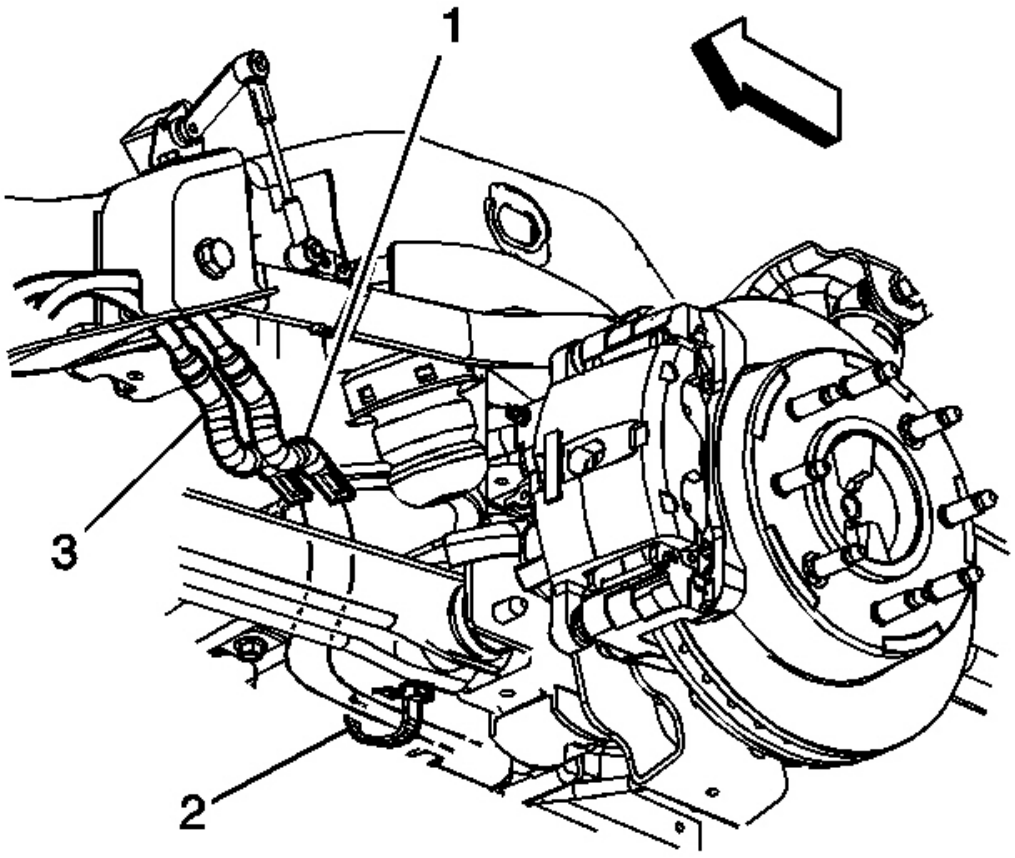


Fig. 46: Park Brake Cable Guide
Courtesy of GENERAL MOTORS CORP.

3. Remove the park brake cable guide bolt.
4. Remove the park brake cable guide (2).
5. Remove the park brake guide from the park brake cable.

Installation Procedure

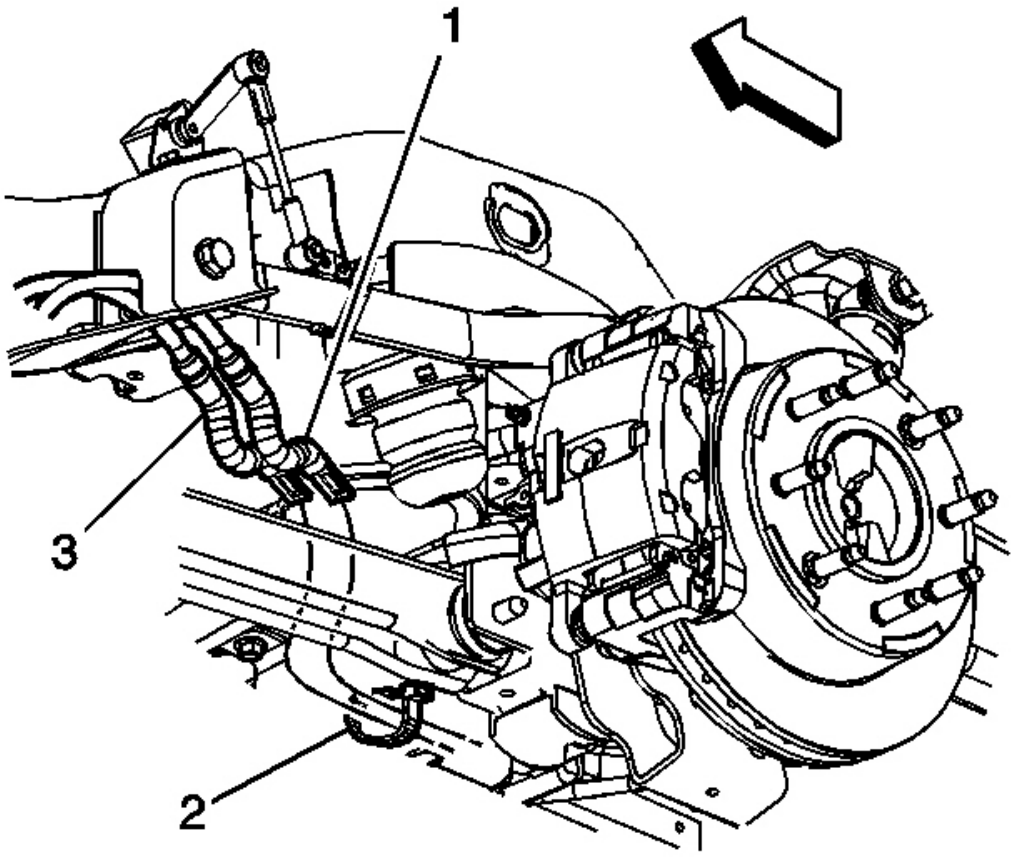


Fig. 47: Park Brake Cable Guide
Courtesy of GENERAL MOTORS CORP.

1. Install the park brake cable guide to the park brake cable.
2. Install the park brake cable guide (2).

NOTE: Refer to Fastener Notice in Cautions and Notices.

3. Install the park brake cable guide bolt.

   Tighten: Tighten the bolt to 12 N.m (106 lb in).

4. Remove the safety stands.
5. Lower the vehicle.

DISABLING THE PARK BRAKE CABLE AUTOMATIC ADJUSTER

Before any components of the parking brake system are serviced, the following procedure must be followed. Two technicians are required to perform this procedure: one inside the vehicle and one outside the vehicle.

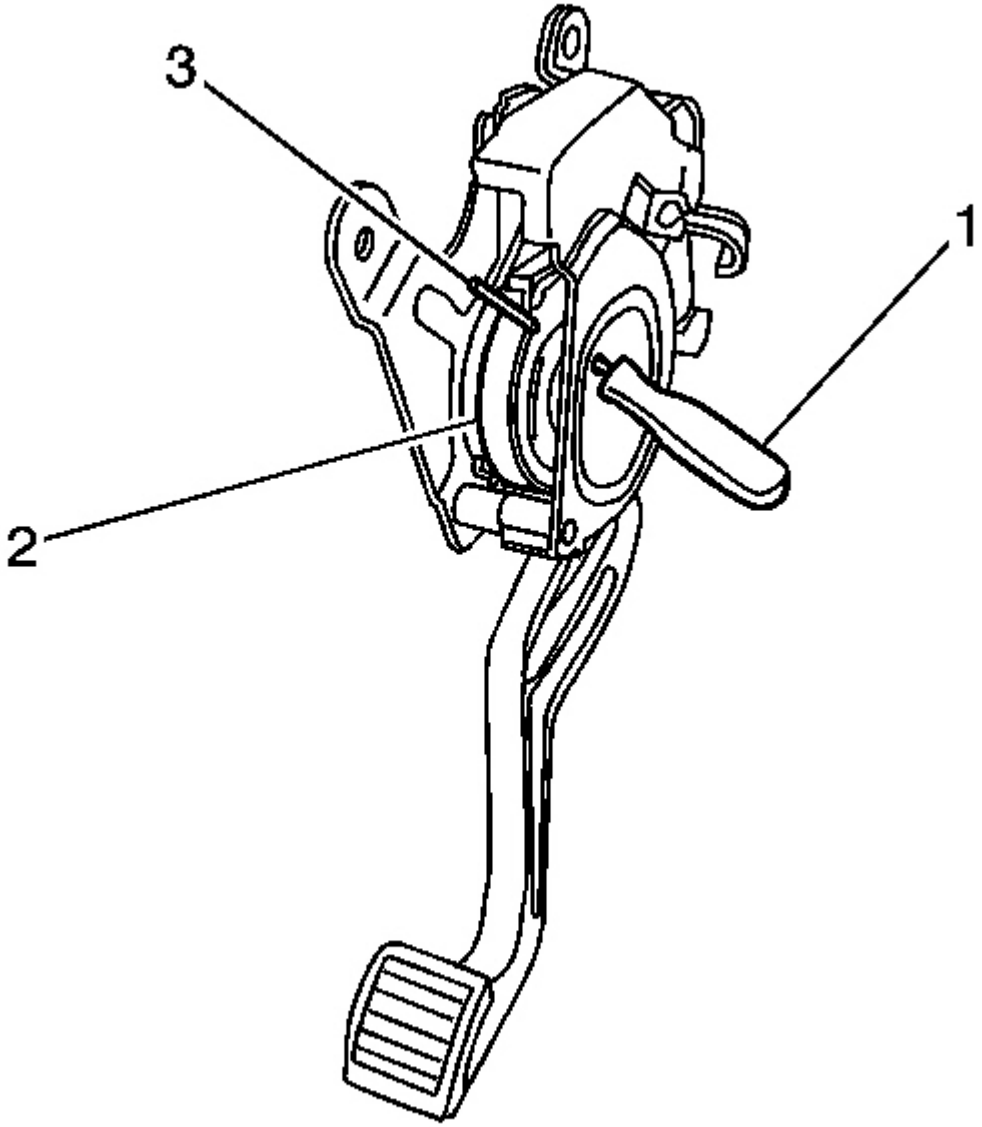


Fig. 48: Park Brake Cable Automatic Adjuster
Courtesy of GENERAL MOTORS CORP.

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Hold the pedal in the FULL upward position.
3. Pull rearward on the front park brake cable until the pedal drum (2) reaches its full reset position.
4. Insert a scribe or the shaft of a thin screwdriver (1) on an upward angle through the hole in the front of the pedal assembly, past the retracted pedal drum, and into the hole in the back of the pedal assembly (3).
5. Slowly release the cable.
6. Remove the component that requires service.

ENABLING THE PARK BRAKE CABLE AUTOMATIC ADJUSTER

If the park brake automatic adjuster has been disabled, the following two person procedure must be performed.

1. Hold the park brake pedal in the FULL upward position.

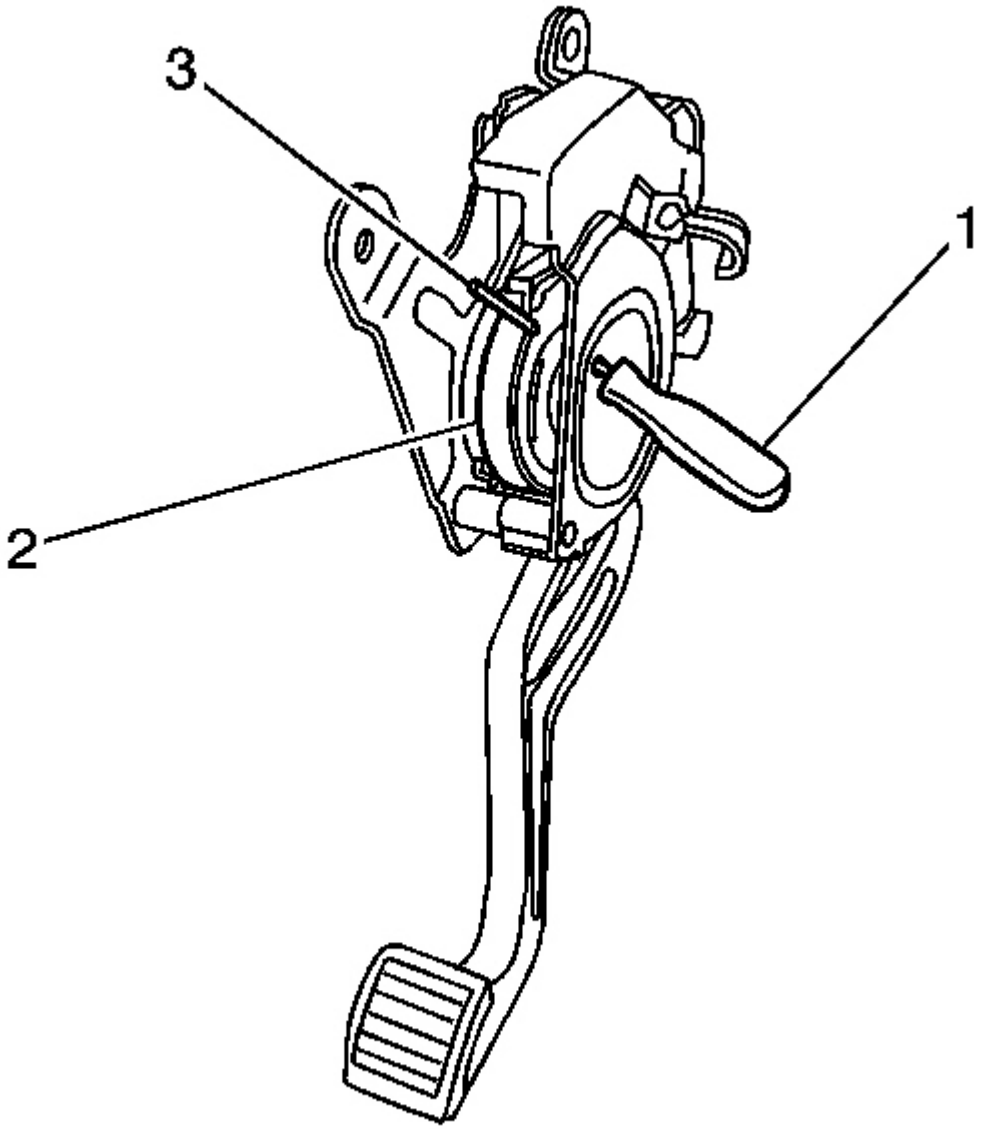


Fig. 49: Park Brake Cable Automatic Adjuster
Courtesy of GENERAL MOTORS CORP.

2. Pull rearward on the front park brake cable until the tension is released from the scribe or nail (1) installed through the holes in the pedal assembly.
3. Remove the scribe or screwdriver (1).
4. Slowly release the park brake cable until it returns to its original position.

5. Release the park brake pedal.
6. Lower the vehicle.
7. Apply and release the park brake pedal to ensure that there is no binding or sticking.

PARK BRAKE ACTUATOR REPLACEMENT

CAUTION: Refer to Brake Dust Caution in Cautions and Notices.

Removal Procedure

1. Disable the park brake cable automatic adjuster. Refer to **Disabling the Park Brake Cable Automatic Adjuster**
2. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
3. Remove the tire and wheel assembly. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
4. Remove the rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.
5. Remove the axle shaft. Refer to **Rear Axle Shaft Replacement** in Rear Drive Axle.
6. Remove the park brake shoe. Refer to **Park Brake Shoe Replacement** .

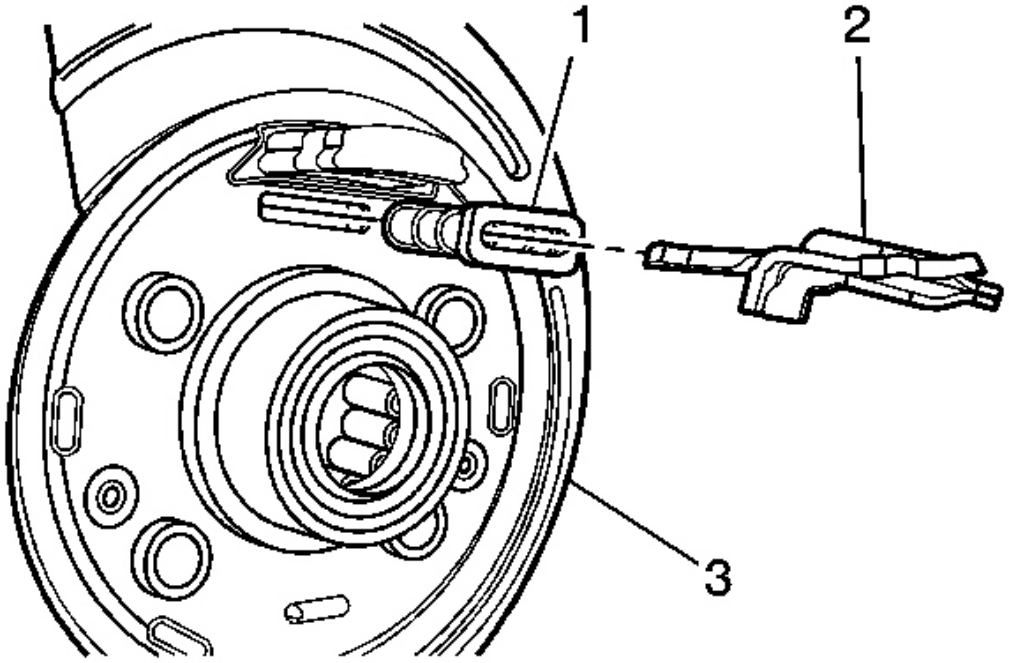


Fig. 50: Park Brake Actuator & Rubber Boot
Courtesy of GENERAL MOTORS CORP.

7. Remove the actuator (2) and rubber boot (1).

Installation Procedure

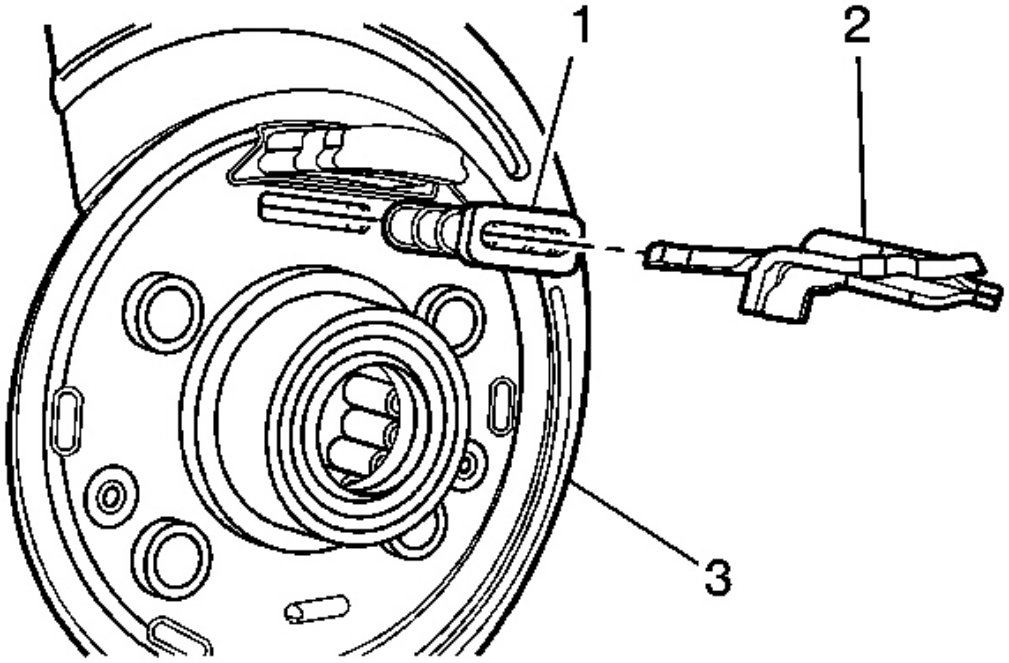


Fig. 51: Park Brake Actuator & Rubber Boot
Courtesy of GENERAL MOTORS CORP.

1. Install the rubber boot (1) and the actuator (2).
2. Install the park brake shoe. Refer to **Park Brake Shoe Replacement** .
3. Install the axle shaft. Refer to **Rear Axle Shaft Replacement** in Rear Drive Axle.
4. Adjust the park brake shoe. Refer to **Park Brake Adjustment** .
5. Install the rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.
6. Install the tire and wheel assembly. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
7. Remove the safety stands.
8. Lower vehicle.
9. Enable the park brake cable automatic adjuster. Refer to **Enabling the Park Brake Cable Automatic Adjuster** in Park Brake.

PARK BRAKE ADJUSTMENT

CAUTION: Refer to Brake Dust Caution in Cautions and Notices.

Tools Required

J 21177-A Drum-to-Brake Shoe Clearance Gauge. See **Special Tools and Equipment** .

Park Brake Shoe Adjustment

IMPORTANT: The park brake shoes must be adjusted before the park brake pedal is adjusted.

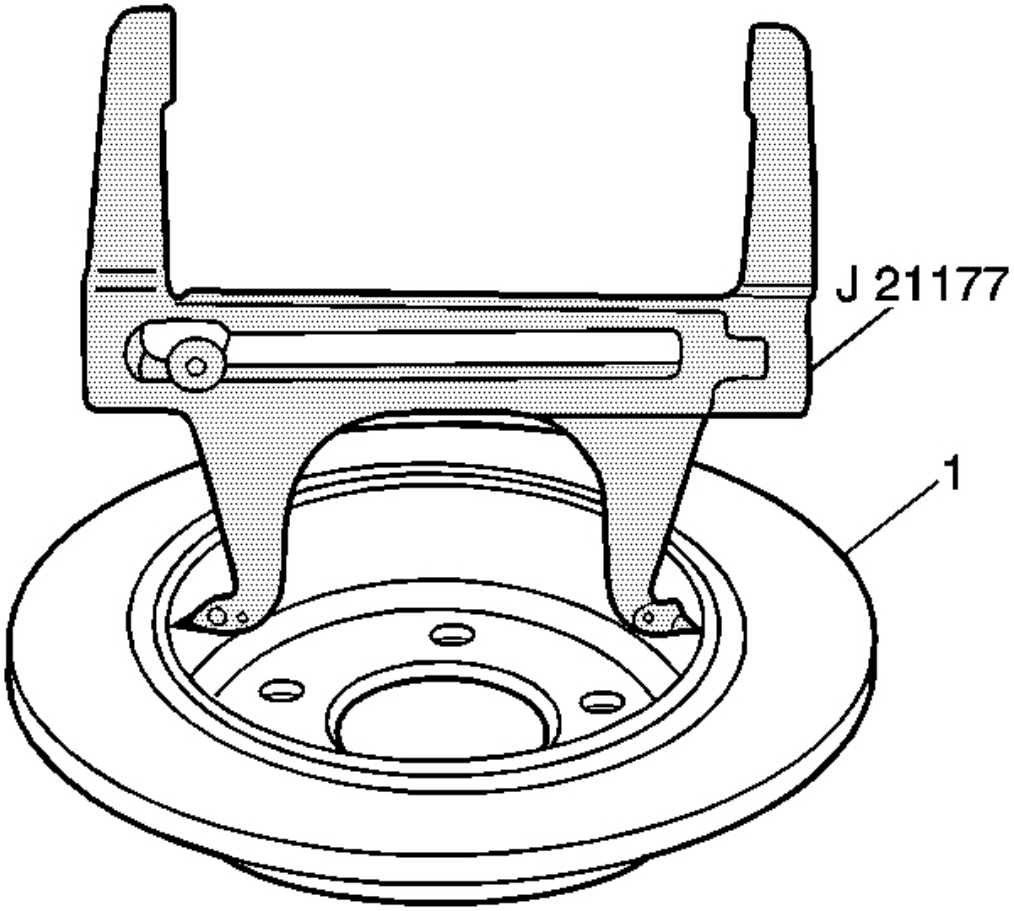


Fig. 52: Applying J 21177-A To Inside Of Brake Drum
Courtesy of GENERAL MOTORS CORP.

1. Set the **J 21177-A** so that it contacts the inside diameter of the rotor (1). See **Special Tools and**

Equipment .

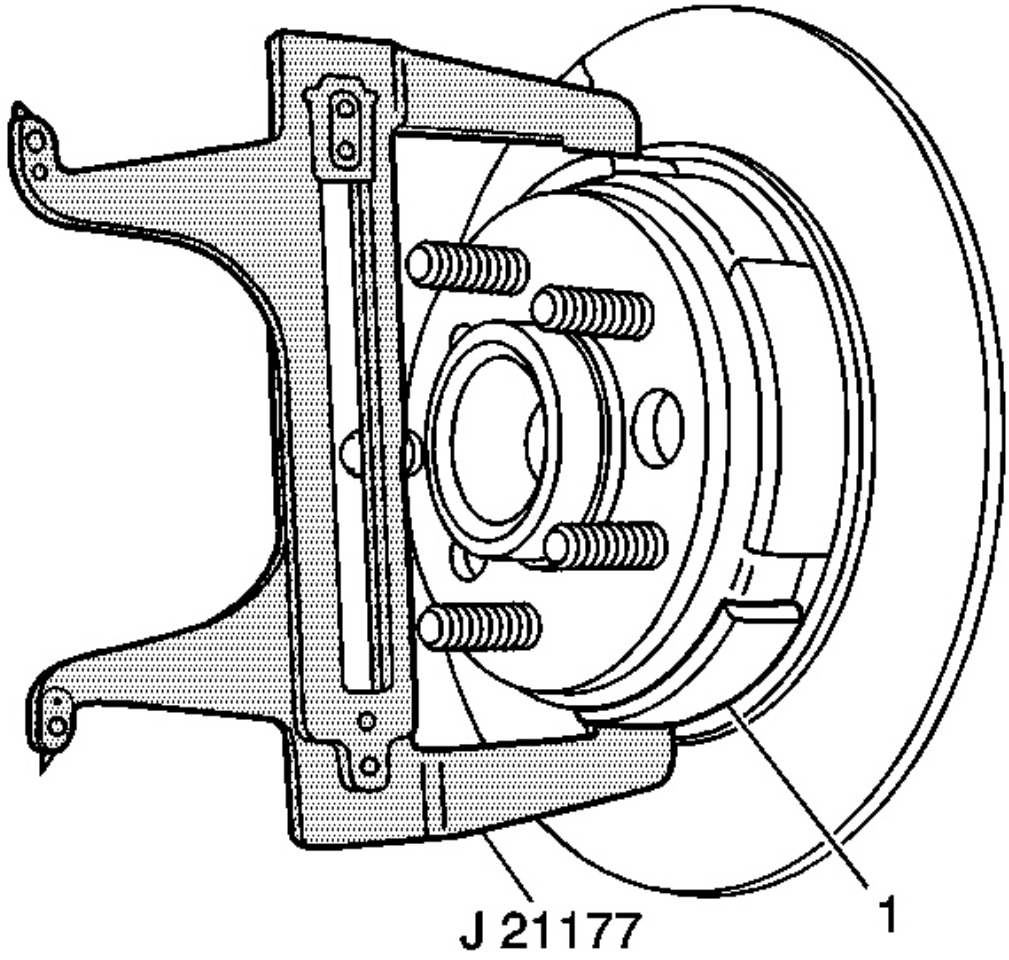


Fig. 53: Adjusting Parking Brake Shoes Using J 21177-A
Courtesy of GENERAL MOTORS CORP.

2. Position the **J 21177-A** over the shoe (1) and the lining at the widest point. See **Special Tools and Equipment** .
3. Turn the adjuster nut until the lining just contacts the **J 21177-A** . See **Special Tools and Equipment** .
4. Repeat steps 1-3 for the opposite side.
5. The clearance between the park brake shoe and the rotor is 0.6604 mm (0.026 in).

Park Brake Pedal Adjustment

IMPORTANT: Before you adjust the park brake, verify that the park brake shoes are adjusted to provide a clearance of 0.6604 mm (0.026 in).

1. Verify that the automatic adjuster lock-out pin has been removed.
2. Fully apply and release the park brake pedal 3 times.

DESCRIPTION AND OPERATION

PARK BRAKE SYSTEM DESCRIPTION AND OPERATION

System Component Description

The park brake system consists of the following:

Park Brake Pedal Assembly

Receives and transfers park brake system apply input force from driver to park brake cable system.

Park Brake Release Handle Assembly

Releases applied park brake system when pulled.

Park Brake Cables

Transfers input force received from park brake pedal, through park brake cable equalizer, to park brake apply lever.

Park Brake Cable Equalizer

Evenly distributes input force to both the left and right park brake units.
Threaded park brake cable equalizers are also used to remove slack in park brake cables.

Park Brake Apply Lever

Multiplies and transfers input force to park brake actuator.

Park Brake Actuator/Adjuster

Uses multiplied input force from apply lever to expand park brake shoe toward the friction surface of the drum-in-hat portion of the rear brake rotor.
Threaded park brake actuators are also used to control clearance between the park brake shoe and the friction surface of the drum-in-hat portion of the rear brake rotor.

Park Brake Shoe

Applies mechanical output force from park brake actuator to friction surface of the drum-in-hat portion of

the rear brake rotor.

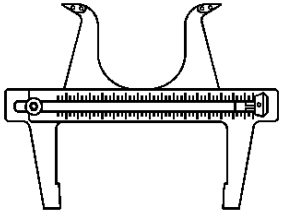
System Operation

Park brake apply input force is received by the park brake pedal assembly being depressed, transferred and evenly distributed, through the park brake cables and the park brake cable equalizer, to the left and right park brake apply levers. The park brake apply levers multiply and transfer the apply input force to the park brake actuators which expand the park brake shoe toward the friction surface of the drum-in-hat portion of the rear brake rotor in order to prevent the rotation of the rear tire and wheel assemblies. The park brake release handle assembly releases an applied park brake system when it is pulled rearward.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Special Tools

Illustration	Tool Number/Description
	J 21177-A Drum-to-Brake Shoe Clearance Gauge