Haynes Chevrolet Colorado 2015-2022

Haynes Repair Manual for Chevrolet Colorado (2015-2022)

Comprehensive Step-by-Step Maintenance, Repair, and Diagnostic Guide for Gas and Diesel Engines

1. Overview and Introduction

This Haynes Repair Manual provides comprehensive, step-by-step procedures for maintaining, servicing, and repairing your Chevrolet Colorado pickup truck models from 2015 to 2022. It covers both 2.5L and 3.6L gas engines, as well as 3.6L LFX and 2.8L LWN diesel engines. Designed for both DIY enthusiasts and professional technicians, this manual includes detailed photographs, illustrations, and diagrams to guide you through every task, from routine fluid changes to complex engine disassembly.
The manual integrates print content with online resources. By scanning QR codes within the book, users can access additional digital content such as wiring diagrams, guided diagnostics, and updated repair information, accessible via mobile, tablet, or desktop devices.

1.1 Models Covered

- **Vehicle:** Chevrolet Colorado (2015-2022)
- **Gas Engines:** 2.5L and 3.6L
- **Diesel Engines:** 3.6L LFX and 2.8L LWN

Figure 1.1: Front cover of the Haynes Repair Manual for Chevrolet Colorado (2015-2022).

2. Routine Maintenance and Servicing

Regular maintenance is crucial for the longevity and reliable operation of your Chevrolet Colorado. This section outlines routine checks and servicing procedures to keep your vehicle in optimal condition.

2.1 Underhood View - 2.5L Engine

Familiarize yourself with the key components under the hood of your 2.5L engine. Refer to the diagram below for component identification.

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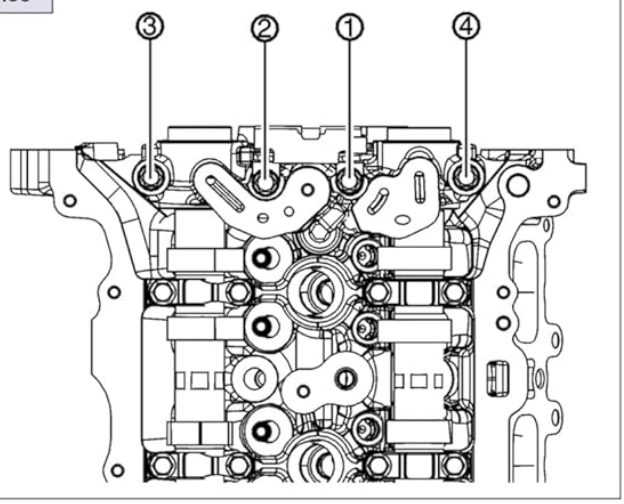

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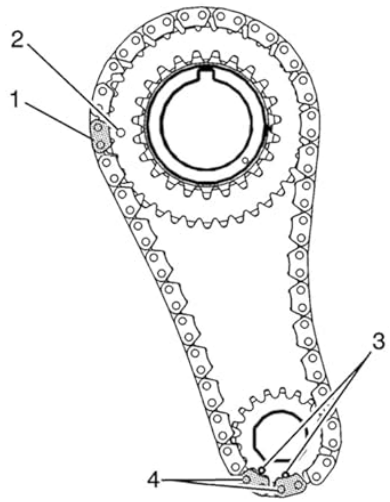


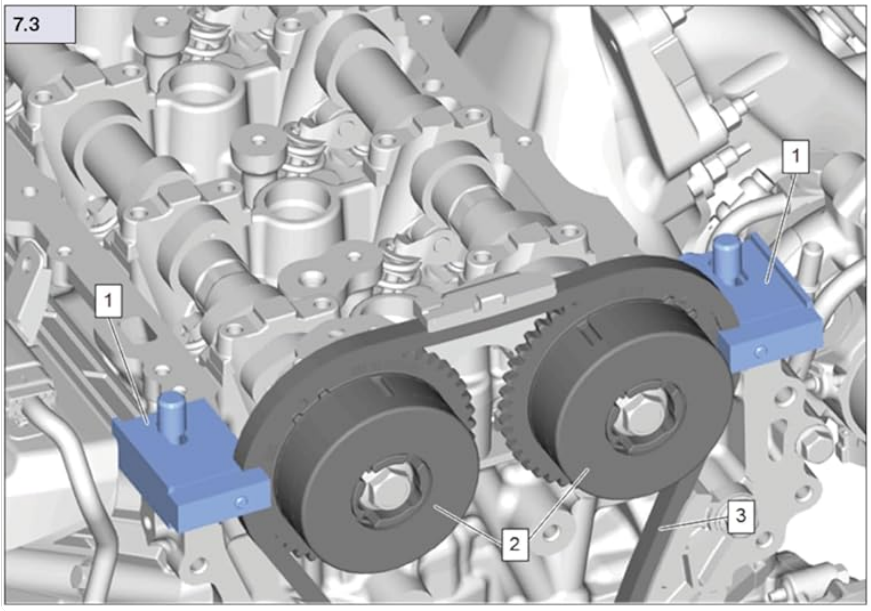
28 Install a new tensioner gasket **(see illustration 6.8)**.
29 Install the tensioner and tighten the bolts to the proper torque.
30 Verify the timing links on the timing chain are properly aligned to the timing marks **(see illustration 6.19)** :
a) The timing links (1, 2) are aligned to the appropriate timing marks on the camshaft actuators (6, 3).
b) The unique colored link (5) is aligned to the timing mark on the crankshaft sprocket (4).
31 If they are not, repeat the portion of the procedure necessary to align the timing marks.
32 Install the upper timing chain guide (1) and bolts (2, 3) finger tight **(see illustration 6.6)**.
33 Tighten the front camshaft cap bolts in sequence to the proper torque **(see illustration)**.
34 Rotate the crankshaft clockwise to see if either of the actuators or the crankshaft sprocket jump timing chain teeth. If this occurs, repeat procedure to align the timing marks.

Note: *Due to the different sizes of crankshaft sprocket and balance shaft sprocket, timing marks on the chain will not match during every crankshaft revolution. Ensure that the marks on the sprockets are aligned appropriately before installing the timing chain.*

35 Verify the timing links on both the timing chain and balance chain are properly aligned to the timing marks **(see illustration)** :
a) The timing link (1) is aligned to the timing mark on the crankshaft sprocket (2).
b) The adjacent timing links (4) are aligned with both timing marks (3) on the balancer shaft driven sprocket.
36 Install the balance chain guide and the balance chain tensioner, rotating the crank clockwise or counterclockwise slightly to keep the timing marks aligned
37 Continue the installation by reversing the rest of the removal procedure.

7 Camshafts, rocker arms and hydraulic lifters – removal, inspection and installation

7.3



Removal

1 Use a long rod in the No. 1 spark plug hole and turn the crankshaft clockwise until it is at Top Dead Center (TDC) for No. 1 cylinder, prior to removing the timing chain. The No. 1 intake and exhaust valve should both be closed, if one is open, rotate crankshaft a further 360 degrees.

Exhaust camshaft

2 Remove the camshaft cover. Refer to: Section 3.
3 Install one timing chain retainer (1) (GM tool no. EN-50656) at each camshaft position actuator and tighten to 6 lb ft (8 Nm). Front cover shown removed for clarity. **(see illustration)**.

Note: *The retainer is installed and securely tightened to prevent the camshaft chain from dropping into the front engine cover during camshaft actuator replacement.*

4 Align and install the camshaft actuator retainer (2) (EN-50793) into the slots of the exhaust cam actuator and mount the tool to the engine front cover assembly to keep the actuator from rotating, then tighten

Figure 2.1: Underhood view of a 2.5L engine. Key components include: 1. Coolant surge tank and pressure cap, 2. Engine air cleaner/filter, 3. Engine oil fill cap, 4. Engine cooling fan, 5. Engine oil level dipstick, 6. Fuse block, 7. Brake/clutch fluid reservoir, 8. Windshield washer fluid reservoir, 9. Battery.

2.2 Lubricants, Fluids, and Tire Pressures

Correct fluid levels and tire pressures are vital for vehicle safety and performance. Use the QR codes below to

access detailed information on recommended lubricants, fluids, and tire pressure specifications for your specific model.

Contents

Figure 2.2: Scan these QR codes for online access to detailed information regarding lubricants, fluids, and tire pressures.

Lubricants and Fluids: https://hyns.io/bdaafeba

Tire Pressure Information: https://hyns.io/5b105005

Important Note: Always refer to the manufacturer's specifications for your specific vehicle model year when performing maintenance. The information provided via QR codes is regularly updated to ensure accuracy.

3. Engine Repair Procedures

This section covers detailed repair procedures for the 2.5L and 3.6L gas engines, as well as the 2.8L LWN diesel engine. It includes instructions for component removal, installation, and adjustments.

3.1 2.5L Engine Repair Procedures

Detailed steps for servicing and repairing components specific to the 2.5L engine, including timing chain procedures, cylinder head work, and more.

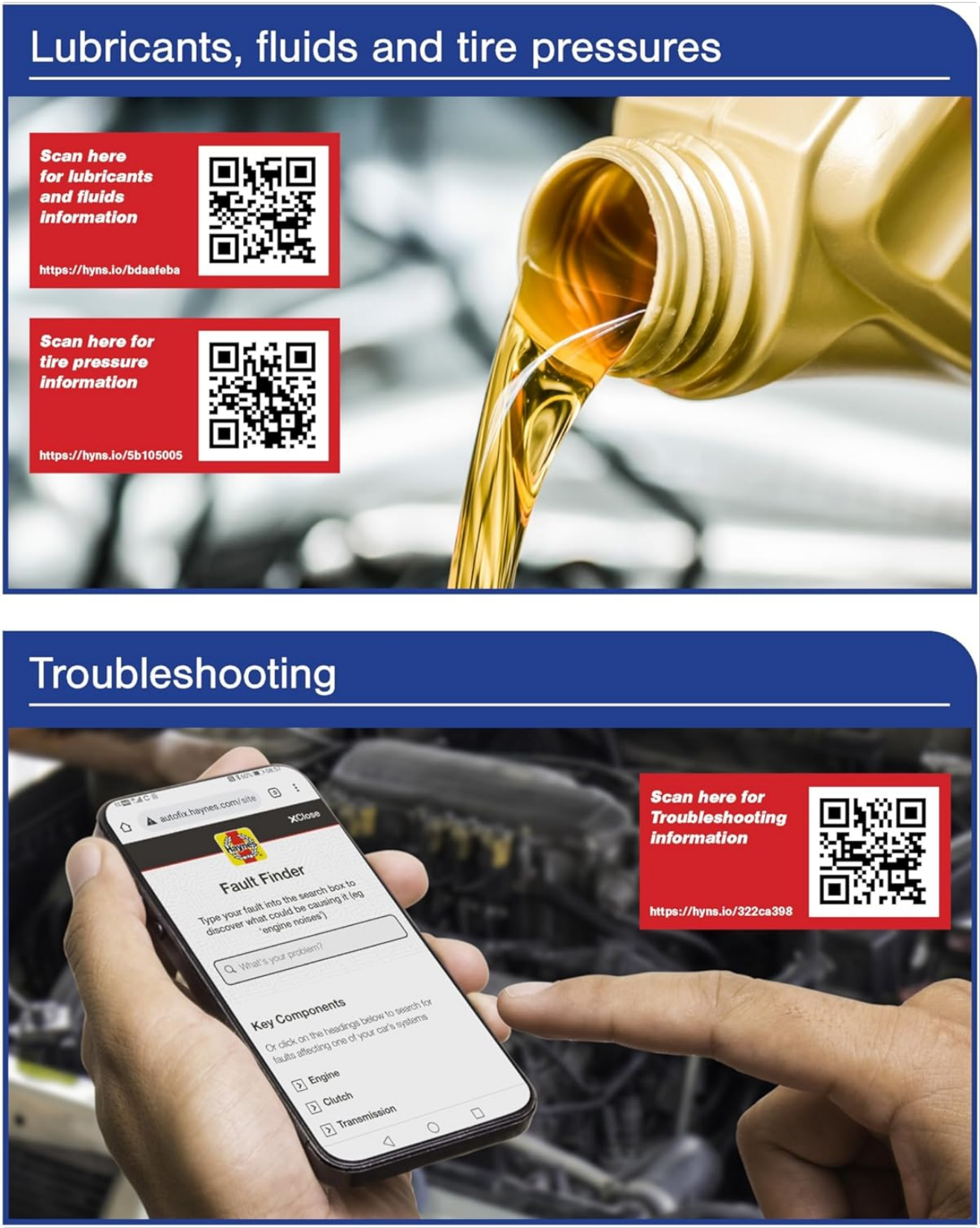


Figure 3.1: Illustration of timing chain and camshaft components for a 2.5L engine, detailing installation and tensioning procedures.

3.2 3.6L Engine Repair Procedures

Comprehensive instructions for the 3.6L gas engine, covering various repair tasks from top-end to bottom-end components.

3.3 2.8L LWN Diesel Engine Repair Procedures

Specific repair guidance for the 2.8L LWN diesel engine, including unique components and systems. Additional diesel repair information is available online via QR code access.

4. Vehicle Systems

This section details the various systems of your Chevrolet Colorado, providing repair and maintenance procedures for each.

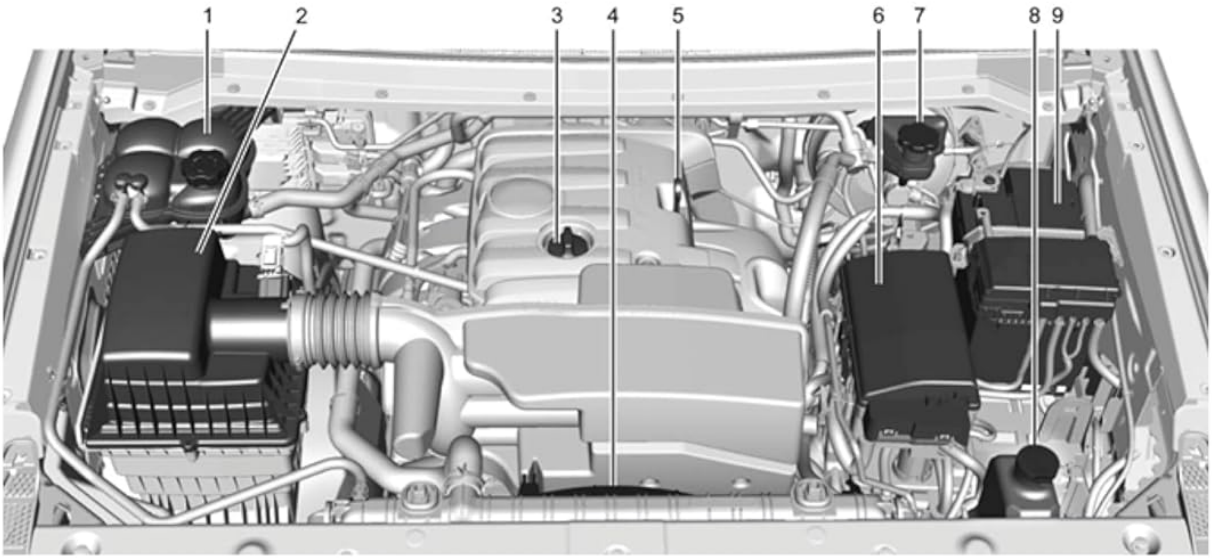
4.1 Cooling, Heating, and Air Conditioning Systems

Procedures for maintaining and repairing the cooling system (radiator, water pump, thermostat), heating system, and air conditioning components.

4.2 Fuel and Exhaust Systems

Information on fuel delivery, fuel injection, and exhaust system components. This includes procedures for the crankshaft position sensor.

Underhood view – 2.5L engine



1 *Coolant surge tank and pressure cap*
2 *Engine air cleaner/filter*
3 *Engine oil fill cap*
4 *Engine cooling fan*
5 *Engine oil level dipstick*
6 *Fuse block*
7 *Brake/clutch fluid reservoir*
8 *Windshield washer fluid reservoir*
9 *Battery*

1 Maintenance schedule

1 The maintenance intervals in this manual are provided with the assumption that you, not the dealer, will be carrying out the work. These are the minimum maintenance intervals based on the standard service schedule recommended by the manufacturer for vehicles driven daily. If you wish to keep your vehicle in peak condition at all times, you may wish to perform some of these procedures more often. We encourage frequent maintenance, because it enhances the efficiency, performance and resale value of your vehicle.
2 If the vehicle is driven in dusty areas, used to tow a trailer, or driven frequently at slow speeds (idling in traffic) or on short journeys, more frequent maintenance intervals are recommended.
3 When the vehicle is new, it should be serviced by a dealer service department (or other workshop recognized by the vehicle manufacturer as providing the same standard of service) in order to preserve the warranty. The vehicle manufacturer may reject warranty claims if you are unable to prove that servicing has been carried out as and when specified, using only original equipment parts or parts certified to be of equivalent quality.
4 The maintenance schedule can be found here:

2 Engine oil and filter – replacement

***Warning:** New or used engine oil can be irritating to the skin. Avoid prolonged or repeated skin contact with engine oil. Contaminants in used engine oil, caused by internal combustion, can be hazardous to your health. Thoroughly wash exposed skin with soap and water. Do not wash skin with gasoline, diesel fuel, thinner, or solvents, health problems can result. Do not pollute, dispose of used engine oil properly. Contact your dealer or government agency for location of collection center in your area.*

1 Frequent oil and filter changes are the most important preventative maintenance which can be undertaken by the DIY owner. As engine oil ages, it becomes diluted and

Figure 4.1: Illustration detailing the removal and installation of the crankshaft position sensor.

4.3 Starting and Charging / Ignition System

Guidance on the starter motor, alternator, battery, and ignition system components, including spark plugs and ignition coils.

4.4 Clutch, Manual Transmission, Automatic Transmission, and Transfer Case

Repair and maintenance procedures for the clutch assembly, manual and automatic transmissions, and the transfer

case for four-wheel-drive models.

4.5 Drive Shaft, Half Axles & Shafts

Instructions for servicing and replacing drive shafts, half axles, and related components.

4.6 Braking System

Detailed procedures for inspecting, maintaining, and repairing the braking system, including disc brakes, drum brakes, parking brake, and brake pedal position sensor.

control module connector surfaces before servicing the control module. Inspect the control module connector gaskets when diagnosing or replacing the control module. Ensure that the gaskets are installed correctly. The gaskets prevent contaminant intrusion into the control module.

65 Disconnect the negative battery cable. Refer to: Chapter 5A Section 3.
66 Remove the radiator surge tank. Refer to: Chapter 3 Section 5.
67 Disconnect the electrical connectors from the engine control module.
68 Use a suitable tool to pry back the locking tabs and remove the engine control module from the bracket **(see illustration)**.

Note: *Before removing the engine control module (ECM), record the oil life percentage remaining. Use the scan tool to reset the Engine Oil Life remaining back to the original percentage recorded.*

Installation

69 Installation is a reversal of the removal procedure.

Crankshaft position sensor

70 Remove the starter. Refer to: Chapter 5A Section 6.
71 Disconnect the electrical wiring harness connector from the crankshaft position sensor.
72 Undo the bolts and remove the crankshaft position sensor **(see illustration)**.
73 Installation is a reversal of the removal procedure. If installing a new sensor, perform the crankshaft position system variation learn procedure using a suitable scan tool.

Camshaft position sensor

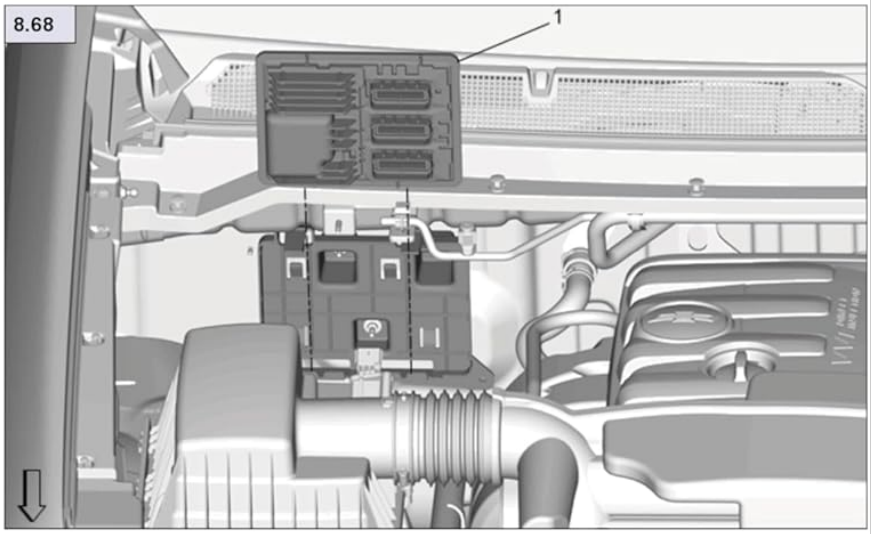
Removal

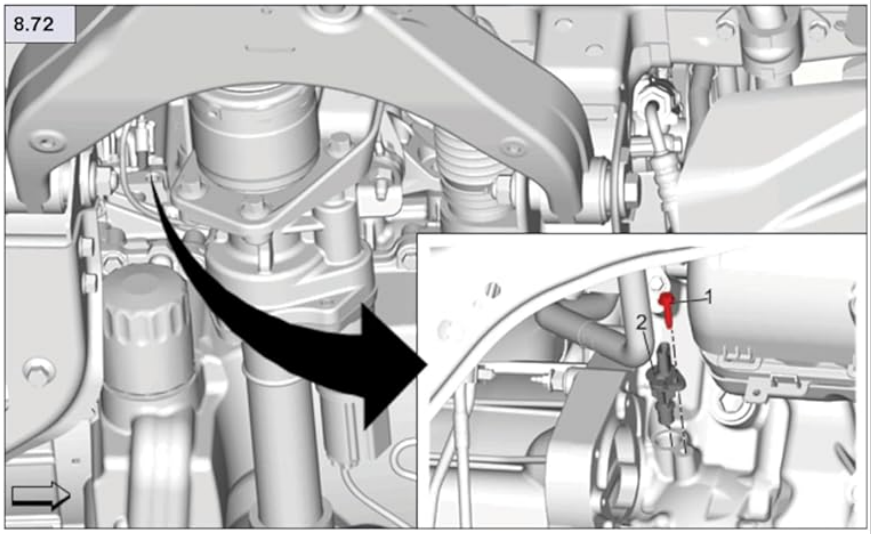
Exhaust

74 Remove the engine cover. Refer to: Chapter 2A Section 2.
75 Disconnect the camshaft position actuator solenoid valve electrical connector.
76 Unclip the wiring harness.
77 Undo the bolts and remove the camshaft cover heat shield **(see illustration)**.
78 Disconnect the electrical wiring harness connector from the exhaust camshaft position sensor.
79 Undo the bolt and remove the exhaust camshaft position sensor **(see illustration overleaf)**.

Intake

80 Remove the engine cover. Refer to: Chapter 2A Section 2.
81 Remove the windshield cowl panel cover. Refer to: Chapter 11 Section 15.





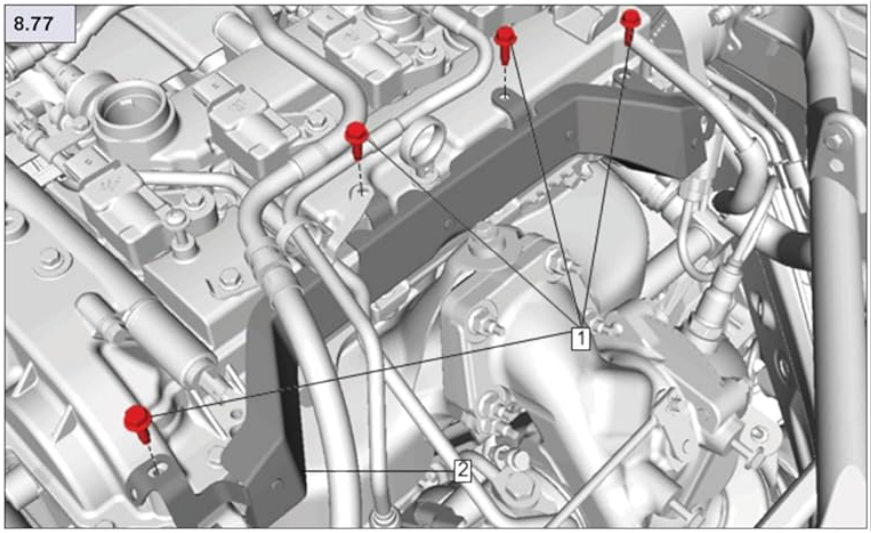


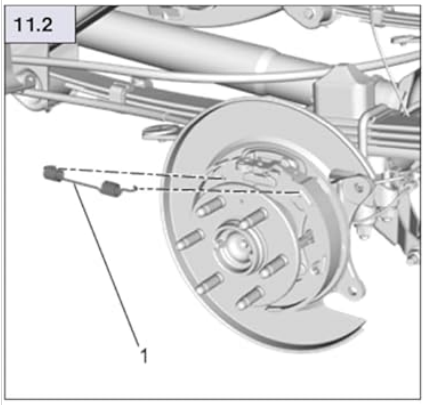
Figure 4.2: Illustrations of various braking system components, including drum brake assembly and brake pedal position sensor.

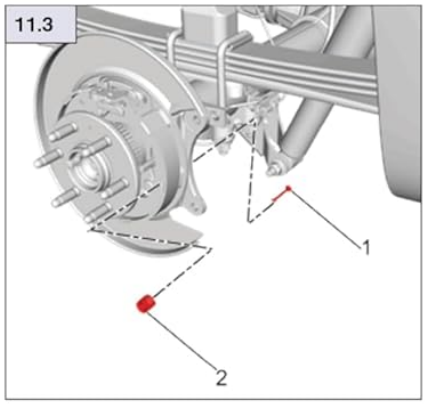
4.7 Suspension & Steering

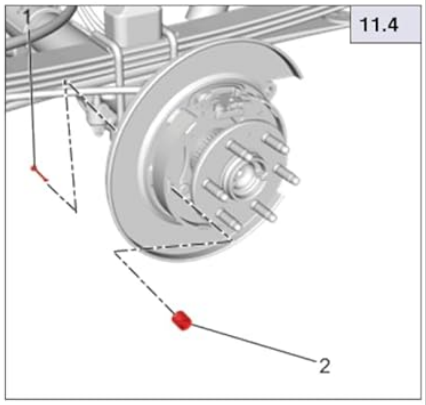
Guidance on suspension components (shocks, struts, springs) and steering system (power steering, steering gear, tie rods).

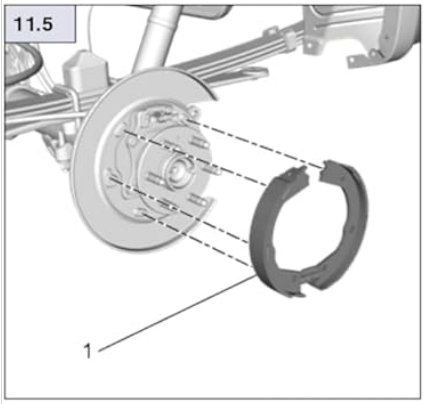
4.8 Body & Accessories / Body Electrical System

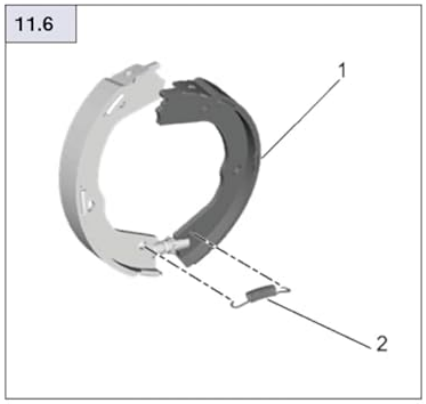
Instructions for bodywork, interior components, and the vehicle's electrical system, including switches and wiring.

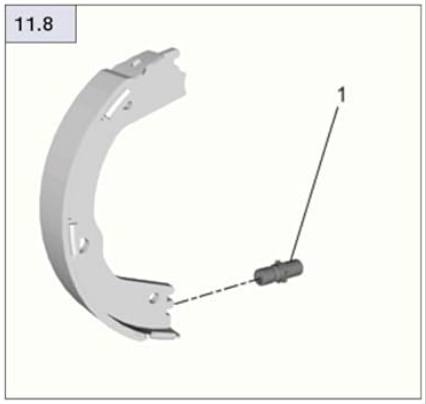










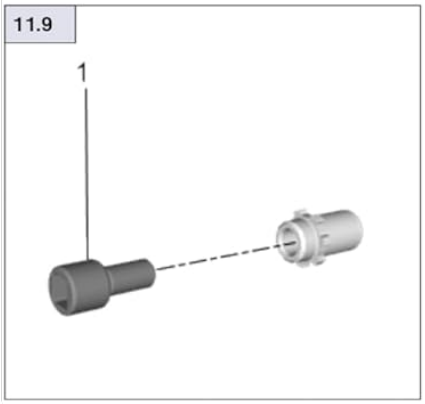


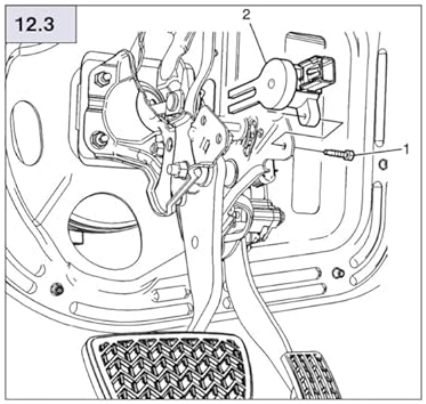
2 Remove the upper parking brake shoe return spring (1) **(see illustration)**.
3 While keeping the pin (1) stationary, compress and rotate the hold down spring and cup (2) ¼ turn and remove the hold down spring and cup **(see illustration)**.
4 While keeping the pin (1) stationary, compress and rotate the hold down spring and cup (2) ¼ turn and remove the hold down spring and cup **(see illustration)**.
5 Remove the parking brake shoes (1) by grasping the shoes near the parking brake actuator, spread the shoes apart and lift over the rear axle flange **(see illustration)**.
6 Cross the top of one of the parking brake shoes (1) over the opposite parking brake shoe **(see illustration)**.
7 Remove the parking brake lower return spring (2).
8 Remove the parking brake shoe adjuster assembly (1) **(see illustration)**.
9 Disassemble the parking brake shoe adjuster (1) **(see illustration)**.
10 Clean the threads of the parking brake shoe adjuster screw (1) of any corrosion or debris.
11 Lightly lubricate the parking brake shoe adjuster screw threads with high temperature brake lubricant and reassemble the adjuster to the fully retracted position.
12 Clean the parking brake shoe backing plate with brake cleaner/denatured alcohol and allow to dry.

Installation

13 Apply a light coat of high temperature brake lubricant to the parking brake shoe to backing plate contact points.
14 The remainder of installation is a reversal of removal. Adjust the parking brake. Refer to: Section 10.

12 Brake sensors/switches – removal and installation





Brake pedal position sensor

Removal

1 Remove the left instrument panel insulator panel. Refer to: Chapter 11 Section 20.
2 Disconnect the brake pedal position sensor electrical connector.
3 Remove the brake pedal position sensor bolt (1) and the brake pedal position sensor (2) **(see illustration)**.

Installation

4 Installation is a reversal of the removal procedure.
5 If a new brake pedal position sensor is

Figure 4.3: Illustrations of body electrical components, including the brake light switch, transfer case selector switch, turn signal switch, wiper/washer switch, and ignition lock cylinder.

4.9 Wiring Diagrams

Access to comprehensive wiring diagrams is available online through the integrated QR codes, providing detailed electrical schematics for troubleshooting and repair.

5. Troubleshooting

This section provides guidance on diagnosing common vehicle problems. For advanced diagnostics and a fault finder tool, utilize the online resources.

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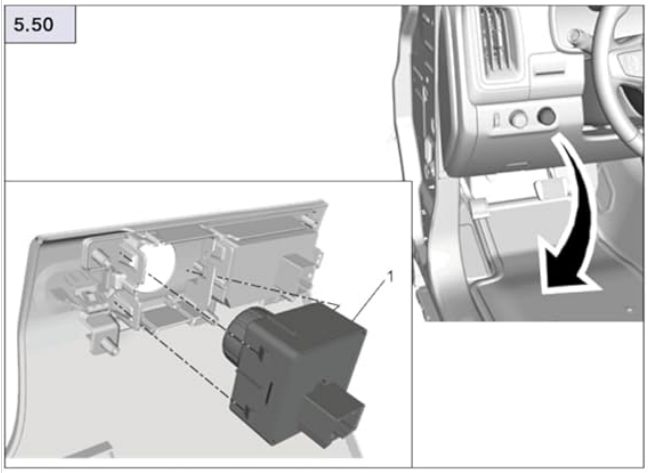

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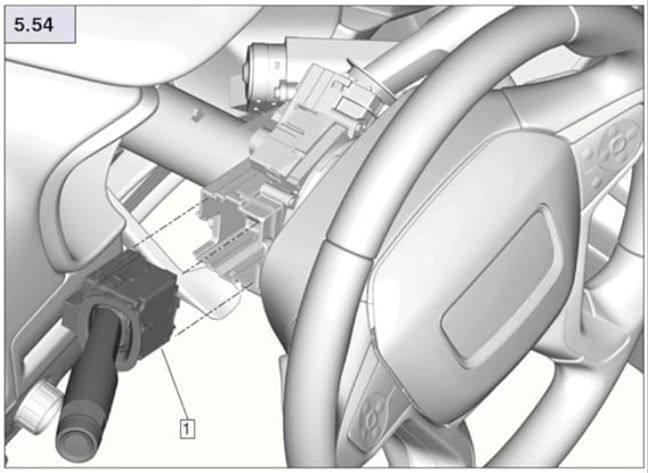

Brake light switch

48 Refer to: Chapter 9 Section 12.

Transfer case selector switch

49 Remove the knee bolster. Refer to: Chapter 11 Section 18.
50 Using the appropriate tool gently depress tabs to remove the switch (1) assembly from the bezel **(see illustration)**.
51 Installation is a reversal of the removal procedure.

Turn signal switch

52 Remove the steering column lower cover. Refer to: Chapter 11 Section 18.
53 Disconnect the switch electrical connector.
54 Release the retaining tabs and remove the turn signal switch (1) from the turn signal switch bracket **(see illustration)**.
55 Installation is a reversal of the removal procedure.

Wiper/washer switch

56 Remove the steering column upper cover. Refer to: Chapter 11 Section 18.
57 Disconnect the switch electrical connector.
58 Release the retaining tabs and remove the windshield wiper and washer switch (1) from the turn signal switch bracket **(see illustration)**.

Ignition and start switch

59 Remove the steering column lower cover. Refer to: Chapter 11 Section 18.
60 Disconnect the switch electrical connector.
61 Undo the bolts (1) and remove the switch (2) **(see illustration)**.
62 Installation is a reversal of the removal procedure.

Ignition lock cylinder

63 Remove the steering column upper cover. Refer to: Chapter 11 Section 18.
64 Turn the ignition key to the RUN position.

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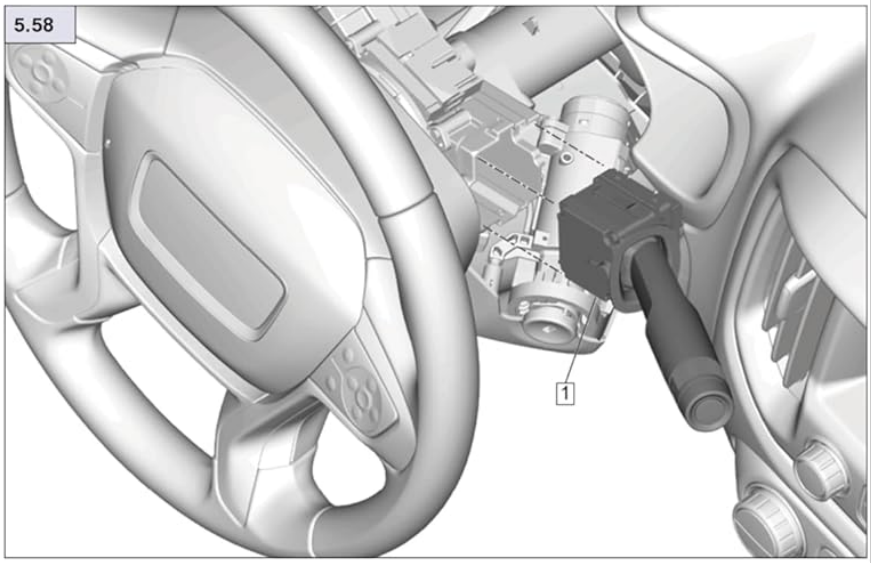

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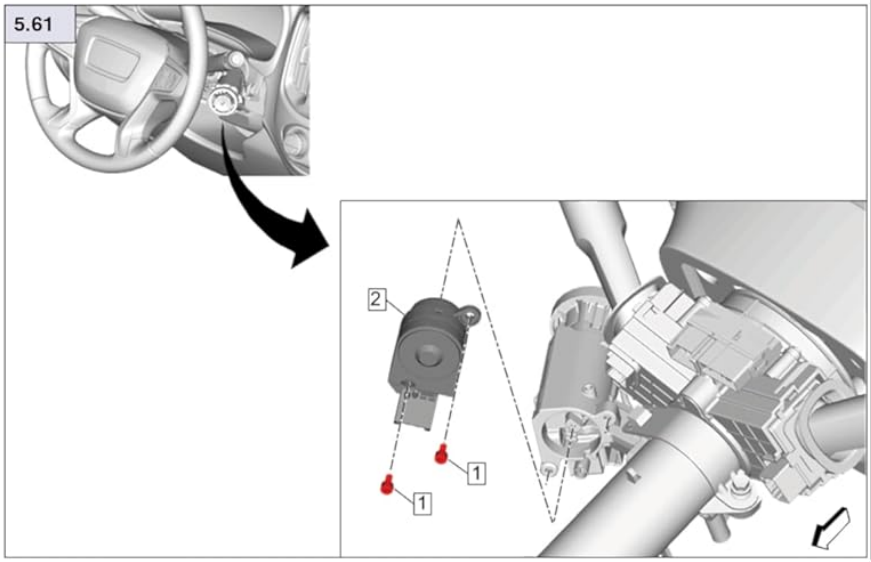

Figure 5.1: Scan this QR code to access the online fault finder and additional troubleshooting information.

Online Troubleshooting Link: https://hyns.io/322ca398

The online fault finder allows you to input symptoms and receive guided diagnostic steps, helping to identify the root cause of issues efficiently.

6. Specifications

This section provides key specifications for the Haynes Repair Manual itself and general product details.

Attribute	Value
Brand	Haynes
Model	Chevrolet Colorado (2015-2022) Haynes Repair Manual
Item Model Number	24028
Product Dimensions	25.91 x 20.88 x 1.52 cm
Item Weight	789 g
ASIN	162092417X
Manufacturer	Haynes Manuals N. America, Inc.

7. Support and Warranty Information

Haynes manuals are designed to empower vehicle owners to perform their own maintenance and repairs, potentially saving significant costs on service center fees. While this manual provides extensive guidance, it is important to exercise caution and consult a professional mechanic for tasks beyond your skill level or comfort.
For additional support, including videos, tips, and details on the complete Haynes line of products, please visit the official Haynes website:

Official Haynes Website: www.haynes.com

This manual is a comprehensive guide, but it does not constitute a warranty for vehicle parts or repairs performed. Always ensure you are using the correct tools, safety equipment, and following all local regulations and safety guidelines when working on your vehicle.