# Service Bulletin

File in Section: -
Bulletin No.: 16-NA-053
Date: May, 2016

# INFORMATION

**Subject:** **2016 Chevrolet Cruze Gen II (VIN B) New Model Features**

**Attention:** **United States and Canada**

| Brand: | Model: | Model Year: | | VIN: | | Engine: | Transmission: |
|---|---|---|---|---|---|---|---|
| | | From: | To: | From: | To: | | |
| Chevrolet | Cruze Gen II (VIN B) | 2016 | 2016 | All | All | 4 Cylinder L4 1.4L Turbocharged — RPO LE2 | Hydra-Matic™ 6T35 6-Speed Automatic FWD — RPO MNU<br>M32 6-Speed Manual Transaxle — RPO MF3 |

## Overview

4379869

4379913

### Bulletin Purpose

This is a special bulletin to introduce the 2016 Chevrolet Cruze. The purpose of this bulletin is to help the Service Department Personnel become familiar with some of the vehicle's new features and to describe some of the action they will need to take to service this vehicle.

### About the Car

The all-new 2016 Cruze is a larger, lighter and more efficient evolution of the brand's best-selling global car. Packed with new technologies such as Apple® CarPlay™ and available Android Auto™ and new

active safety features, as well as a more spacious interior and an aerodynamically optimized design, the 2016 Cruze elevates the compact car segment. A new, standard 1.4L turbocharged engine with direct injection and an SAE-certified 153 horsepower (113 kW) helps enable a General Motors estimated 42 mpg (5.6 L/100km) on the highway with the available six-speed automatic transmission (L,LS and LT models). Stop/Start technology helps enhance the Cruze's efficiency in stop-and-go driving on vehicles equipped with the 6-speed automatic transmission. The new turbo engine and a leaner architecture that reduces up to 250 pounds (113 kg) of weight also contribute to the new Cruze's stronger performance, with an expected 0-60 mph (0-97 km/h) acceleration of 8 seconds.

**Fuel Economy**

The expected fuel economy is as follows:

– United States fuel economy rating for L, LS and LT models is 30/42/35 mpg for automatic transmission and 29/41/33 mpg for manual transmission. United States fuel economy rating for Premier is 30/40/34 mpg.

– Canada fuel economy rating is 7.8/5.6/6.8 L/100km for automatic transmission and 8.2/5.8/7.1 L/100km for manual transmission. Canada fuel economy rating for Premier is 7.8/5.9/6.9 L/100km.

**Vehicle Highlights**

Some of the vehicle highlights are:

- New model range for North America including L, LS, LT and Premier – and a more expressive RS package.
- Class-leading 106.3-inch (270 cm) wheelbase enhances roominess, contributing to greater rear seat legroom and more rear knee room.
- More standard features than most competitors' small cars such as 10 airbags, four-wheel disc brakes with Duralife™ extended life rotors which are standard on all models, rear vision camera (RVC) and available OnStar® 4G LTE with Wi-Fi hotspot.
- Next-generation Chevrolet MyLink™ with smartphone integration capability, including a standard seven-inch (178 mm) diagonal screen and available eight-inch (203 mm) diagonal screen (at launch, eight-inch (203 mm) diagonal screen only with Apple CarPlay™; Android Auto™ coming later).
- Projector headlamps with light-emitting diode (LED) signature lighting and LED daytime running lamps on uplevel models.
- New features including wireless phone charging available as part of an option package only on the Premier model (requires an owner provided adapter), heated cloth front seats (available on LT model), heated leather appointed rear seats (available on Premier model) and heated, leather-wrapped steering wheel (available on Premier model). Note: In Canada, heated cloth front seats are standard on LT models and heated, leather-wrapped steering wheel is standard on Premier models.
- Available advanced safety features include Side Blind Zone Alert (SBZA), Rear Cross Traffic Alert (RCTA), Lane Keep Assist (LKA), Lane Departure Warning (LDW) and Forward Collision Alert (FCA).

**Wind Tunnel Optimized Design**

The 2016 Cruze's expressive design balances the designers' inspiration and the efficiency optimizing input of wind tunnel testing, leveraging the aero experience of vehicles including the Volt. The result is one of the sleekest-looking cars in the class, with a 0.29 coefficient of drag.

Proportionally, the new Cruze is 2.7-inches (68 mm) longer and nearly an inch (25 mm) shorter in height than the current model, giving it a longer and leaner appearance. A faster windshield rake and a faster sloping rear profile lend a sportier look to the design, while the rear profile culminates in a standard integral rear spoiler that contributes to the car's aero efficiency.

4407105

The headlamps sweep back into the front fenders and an expressive, stacked dual-port grille design offers upscale attention to detail. LT and Premier models feature premium forward lighting systems, including projector-beam headlamps and LED signature daytime running lamps.

Additional design details include:

- The center-rear stop lamp is mounted at the top of the roof line for a more refined appearance.
- Seamless rocker panels convey upscale attention to detail and contribute to aerodynamic performance.
- Polished aluminum, piano black and bright-finished accents provide a more contemporary, upscale aura to the design.
- The RS package includes unique grilles, front and rear fascias, fog lamps, front splitter, rocker panels, rear spoiler and 18-inch wheels on the Premier model.

### Roomier, More Connected Passenger Space

With greater spaciousness and technology, the 2016 Cruze's interior is designed to be more comfortable and a better connected environment for the driver and passengers. The greater spaciousness includes more rear legroom 36.1-inches (917 mm) and 2-inches (51 mm) more rear knee room.

The Cruze's interior and the instrument panel in particular feature lean, muscular and layered surfaces built around the Chevrolet signature dual-cockpit theme. It's a thoroughly modern design that emphasizes human-technology interaction through the prominent, standard MyLink™ screen in the center stack.

Additional interior features and amenities include:

- Improved leg room and knee clearance give rear seat passengers a more comfortable ride.

4407129

- Vehicles equipped with the automatic transmission utilize a foot-operated parking brake which allows for a new center console design with a longer armrest, an ergonomically positioned shifter, more intuitive positioning of the cup holders and enhanced storage.

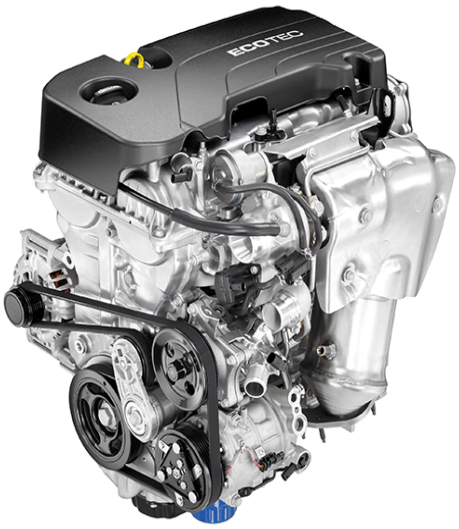
4407139

- Available on LT and Premier models is a 4.2-inch (107 mm) diagonal high-resolution driver information center (DIC) in the gauge cluster.

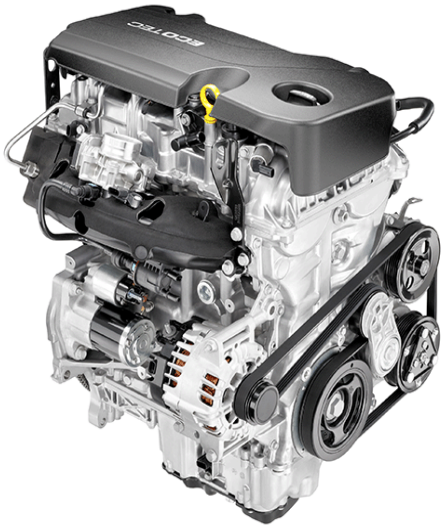
4409170

- Clearer delineation between the infotainment and HVAC controls for easier at-a-glance operation.
- More soft-touch surfaces and animal-grained, micro-etched surfacing that enhance the premium look and feel of the interior, as well as premium fabrics with French stitching, distinctive for its contrasting stitch colors. Premium leather is available.

## Engine




4409178




4409337

Typical views of the 1.4L I4 Turbocharged DI VVT engine.

The all-new Ecotec 1.4L turbocharged engine — RPO LE2 is part of GM's new, global family of Ecotec small-displacement engines. Engineered to deliver strong performance with excellent efficiency, the new Ecotec engine family represents a clean-sheet design and engineering process, leveraging the diverse experience of GM's global resources.

The engine features an aluminum cylinder block and head, which help reduce the vehicle's overall mass to enhance performance and efficiency, while technologies such as central direct fuel injection (DI) and continuously variable valve timing (VVT) complement the efficiency goals with broad power bands, for an optimal balance of strong performance and low fuel consumption.

Some product highlights are:

– Advanced math-modeled combustion system
– Variable-flow oiling system to maximize fuel efficiency
– Integrated dual-overhead cam cylinder head/exhaust manifold to further reduce engine weight
– Designed for refinement and low vibration and noise levels
– Stringent performance and durability trials
– Extended life spark plugs
– Extended life coolant
– 2-stage variable displacement oil pump
– Low friction, PVD piston rings
– Integrated N & V Cover on Intake Manifold

**Engine Specifications and Component Descriptions**

- **Displacement:** 1.4 L (1399 cc) — (85 cubic inches)
- **Bore :** 66 mm (2.598 inches)
- **Stroke:** 81.3 mm (3.20 inches)
- **Compression Ratio:** 10.0:1
- **Horsepower:** 153 horsepower (114 kW) @ 5,600 rpm — SAE Certified
- **Torque:** 177 lb.ft (240 Nm) @ 2000–4000 rpm — SAE Certified
- **Cylinder Block: Cast aluminum 380 T5:** The cylinder block is constructed of aluminum alloy by high-pressure die casting with 4 cast-in-place iron cylinder liners arranged in-line. The block has 5 crankshaft bearings with the thrust bearing located on the second bearing from the rear of the engine. The cylinder block incorporates a bedplate design that forms an upper and lower crankcase. This design promotes cylinder block rigidity and reduced noise and vibration.
- **Cylinder Head: Cast aluminum 356 T7:** The cylinder head is double over head camshaft (DOHC) design and has 2 camshafts that open 4 valves per cylinder with hydraulic valve lash adjusters. The camshaft sprocket wheels are installed in front of the camshafts. The cylinder head is made of cast aluminum alloy for better strength in hardness with light weight. The combustion chamber of the cylinder head is designed for increasing of squish and swirl efficiency and this maximizes gasoline combustion efficiency. The exhaust manifold is integrated into the cylinder head.
- **Crankshaft:** The crankshaft is premium forged micro alloy steel. It is supported in 5 main journals with main bearings which have oil clearance for lubricating. The thrust bearing is located in the 4th position which controls proper crankshaft axial end play. The crankshaft is also comprised of 8 counterweights that have been scalloped for mass

reduction and topped for precise engine balance. A harmonic balancer is used to control torsional vibration.

- **Main Bearing Caps:** Iron inserts cast into Bedplate.
- **Camshaft/ Camshaft Drive:** Two camshafts are used, one for all intake valves, the other for all exhaust valves. The camshafts are assembled with steel lobes. This engine design uses a chain to drive the dual overhead camshafts. The chain is an inverted tooth or silent design with a 6.35 mm pitch to ensure quiet operation and is hydraulically tensioned to be maintenance-free. The tensioner has a ratchet mechanism to reduce chain movement during engine starts to eliminate noise. The lightweight plastic/composite chain guides have a unique grooved face design to reduce friction for optimum efficiency. Both the crank sprocket and cam sprockets are hardened to prevent wear even with extended oil change intervals.
- **Piston and Connecting Rod:** The pistons are cast aluminum. The pistons use 2 compression rings and 1 oil control ring assembly. The piston is a low friction, lightweight design with a recessed top and barrel shaped skirt. The piston pins are chromium steel and are a full-floating design. The connecting rods are powdered metal. The connecting rods are fractured at the connecting rod journal and then machined for the proper clearance. All applications use a piston with a graphite coated skirt. The piston and pin are to be serviced as an assembly.
- **Valves:** There are 2 intake and 2 exhaust valves per cylinder. Positive valve stem seals are used on all valves.
- **Valve Lash Adjusters:** The valve train uses a roller finger follower acted on by a hydraulic lash adjuster. The roller finger follower reduces friction and noise.
- **Intake Manifold:** The intake manifold is the air flow passage to the cylinder combustion chamber through the throttle body and has an effect on engine torque, power, noise, driveability, emission, fuel economy and performance. It is made of composite plastic. The intake manifold incorporates a distribution and control system for positive crankcase ventilation (PCV) gases.
- **Fuel Injection System:** The engine is equipped with a central direct injection system. The fuel system consists of 4 separate direct injection fuel injectors, one high pressure fuel rail, and a high pressure fuel feed pipe that connects the high pressure fuel pump to the fuel rail. The injectors are each seated into their individual bores in the cylinder head with two combustion seals to provide sealing. The high pressure fuel pump mounts to the rear of the cylinder head and is driven by the intake camshaft. Motion is transmitted to the pump from a tri-lobe on the rear of the camshaft through a hydraulic roller lifter. Due to the location of the central direct injection system injector location this provides an increase in fuel economy and performance.
- **Upper Oil Pan:** The oil pan is a structural aluminum oil pan with transmission attachment. It includes the oil suction pipe, this pipe is connected with the oil pump. The oil pan is attached at the lower crankcase.
- **Oil Pump:** The oil pump is a crankshaft driven oil pump integrated in pump module. The oil pump draws engine oil from the oil pan and feeds it under pressure to the various parts of the engine. An oil strainer is mounted before the inlet of the oil pump to remove impurities which could clog or damage the oil pump or other engine components. When the crankshaft rotates, the oil pump driven gear rotates. This causes the space between the gears to constantly open and narrow, pulling oil in from the oil pan when the space opens and pumping the oil out to the engine as it narrows. At high engine speeds, the oil pump supplies a much higher amount of oil than required for lubrication of the engine. The oil pressure regulator prevents too much oil from entering the engine lubrication passages.
- **Turbocharger:** The turbocharger consists of a turbine and a compressor on a common shaft. The shaft bearing is constructed for higher rotation speed and lubricated by engine oil. The turbocharger is water cooled for improved durability. The turbine wheel is driven by exhaust emissions. The compressor wheel compresses the intake air. A wastegate bypass valve regulates the charging pressure in order to generate the optimum pressure at both low and high speeds. At a defined charging pressure it regulates the way of the exhaust emission on bypassing the turbine wheel. The wastegate valve is controlled pneumatically and electrically from the pressure in the intake manifold. The pressure of the exhaust emissions are reduced by opening the wastegate thereby reducing the intake pressure.
- **Recommended Fuel:** Regular unleaded.

## dexos® Engine Oil

dexos® APPROVED

3512027

3511747

Ask for and use engine oils that meet the dexos® specification. Engine oils that have been approved by GM as meeting the dexos® specification are marked with either of the dexos1® approved logos that are shown. For additional information, visit this General Motors website: **http://www.gmdexos.com**

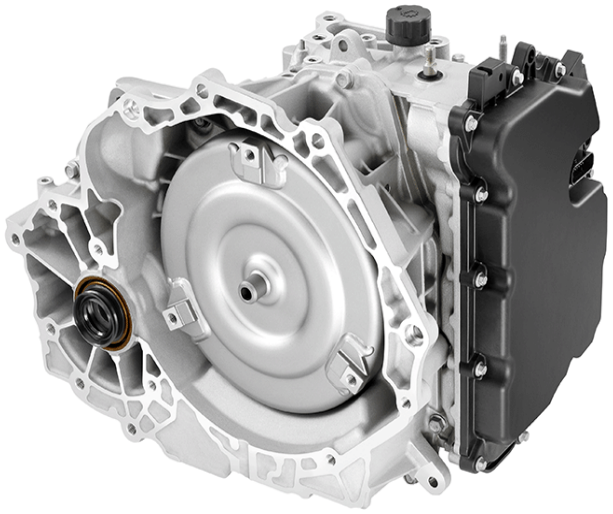
### Viscosity Grade

Use ACDelco dexos1® synthetic blend SAE 5W-30 viscosity grade engine oil. In an area of extreme cold, where the temperature falls below −20°F (−29°C) use SAE 0W-30 engine oil. An oil of this viscosity grade will provide easier cold starting for the engine at extremely low temperatures.

### Engine Oil Life System

The vehicle features GM's engine oil life system, which better protects engines by recommending oil changes based on a computer software algorithm using actual engine operating conditions and can save the vehicle owner money by avoiding unnecessary oil changes.

## Transmission — Hydra-Matic™ 6T35 6-Speed Automatic Transaxle — RPO MNU



4409841

**Hydra-Matic™ 6T35 6-Speed Automatic FWD Transmission/Transaxle**

Typical view of the Hydra-Matic™ 6T35 6-speed automatic FWD electronically controlled, automatic overdrive transaxle with an electronically controlled torque converter clutch.

The new Hydra-Matic™ 6T35 6-speed automatic transmission offered with the Cruze's new 1.4L turbo engine expands GM's multispeed transmission family for transverse powertrain systems. Shared traits between GM's six-speed automatic transmissions also reduce complexity, size and mass, including clutch-to-clutch operation that enables the six-speed to be packaged into approximately the same space of a four-speed automatic. The 6T35 also features Gen 3 upgrades implemented to enhance efficiency. The pump, for example, has been moved off-axis, which allows better sealing of the torque converter, reducing pump flow demands to enhance fuel economy. Additionally, the pump is now a binary vane-type, which allows lower power consumption during times of lower flow demands and at higher engine speeds.

- The transmission case material is made from die cast aluminum
- Comparable torque capacity of the larger 6T40, but in a smaller, 24 lbs (11 kg) lighter package. Transmission weight is 165 lb (75 kg)
- Larger TCC piston and isolator to enhance the capacity of the 6T35 to handle up to 250 Nm engine torque
- Clutch-to-Clutch shift operation
- Adaptive shift controls
- IX Gear Pump
- Ground and honed gears

### Torque Converter

The 3-element torque converter contains a pump, stator and turbine with an integral isolator and clutch. The torque converter acts as a fluid coupling to smoothly transmit power from the engine to the transmission. It also hydraulically provides additional torque multiplication when required. The clutch pressure plate when applied, provides a mechanical direct drive coupling of the engine to the transmission. The torque converter features:

– A single-plate lock-up clutch
– Electronic Controlled Capacity Clutch (ECCC) technology
– Space-saving hyper-elliptical torque converter

### Transmission Gear Ratios

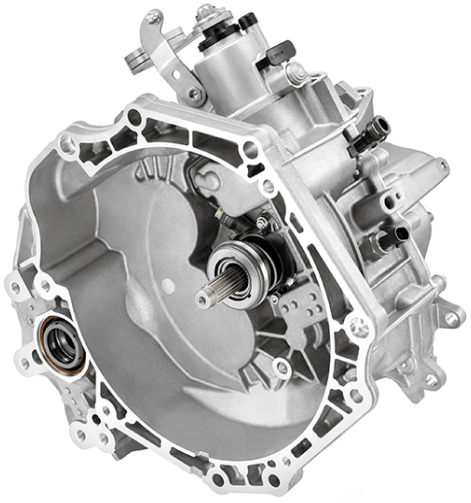
The transmission has the following gear ratios:

- **First:** 4.449
- **Second:** 2.908
- **Third:** 1.893
- **Fourth:** 1.446
- **Fifth:** 1.000
- **Sixth:** 0.742
- **Reverse:** 2.871
- **Final Drive Ratio:** 3.140

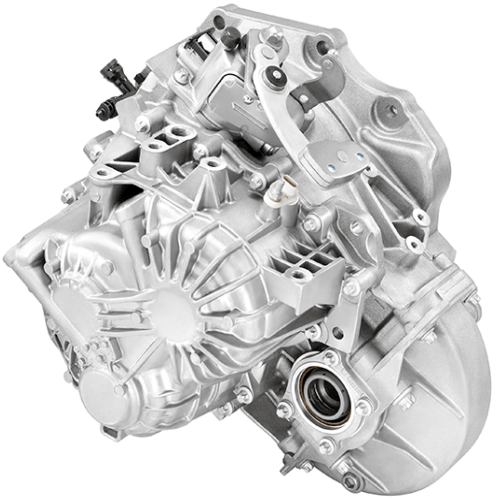
### Transmission Fluid Level and Condition Check

The transmission uses DEXRON® VI transmission fluid. When performing fluid checks, always refer to SI for the proper procedure.

## M32 6-Speed FWD Manual Transaxle — RPO MF3



4419318



4419349

### M32 6-Speed FWD Manual Transaxle

The M32 six-speed manual transmission is a high-capacity gearbox for transverse configurations. A wide, 7:1 overall ratio balances acceleration and efficiency. The M32 has a premium three-shaft design with synchronizers for all gears, including reverse. First and second gears feature triple-cone synchronizers and double-cone synchronizers are used on third and fourth gears. An external shift system enhances the high-quality feel of the transmission with short, precise shifts, as well as a vibration absorber.

- Compact Construction
- Smooth running performance
- Better shift quality
- High torque capability
- Low weight: 103 lbs (46.7 kg) (Dry)
- Transversal, three shafts
- Case material: aluminum, 3 piece housing
- Synchronization: 1st & 2nd: Triple Cone, 3rd/4th: Double Cone, 5th/6th/rev: Single Cone
- Fluid capacity: 2.0 qt (1.9 L)

### Transmission Gear Ratios

The transmission has the following gear ratios:

- **First:** 4.273
- **Second:** 2.158
- **Third:** 1.302
- **Fourth:** 0.959
- **Fifth:** 0.744
- **Sixth:** 0.614
- **Reverse:** 3.818
- **Final Drive Ratio:** 3.833

### Transmission Fluid Drain and Fill

Fluid type: BOT 0303-mod (low viscosity oil). When performing fluid checks, always refer to SI for the proper procedure.

## Airbag System

**Airbag Readiness Light**

This light shows if there is an electrical problem with the airbag system. The system check includes the airbag sensors, passenger sensing system, the pretensioners, the airbag modules, the wiring, and the crash sensing and diagnostic module (SDM). The airbag readiness light turns **ON** for several seconds when the vehicle is started. If the light does not turn **ON**, have it repaired immediately.

All vehicle airbags have the word AIRBAG on the trim or on a label near the deployment opening. The airbags are located in the following positions:

– A frontal airbag for the driver.
– A frontal airbag for the front outboard passenger.
– Knee airbag for the driver.
– Knee airbag for the front outboard passenger.
– Seat-mounted side impact airbag for the driver.
– Seat-mounted side impact airbag for the front outboard passenger.
– Seat-mounted side impact airbags for the second row outboard passengers.
– A roof-rail airbag for the driver and the passenger seated directly behind the driver.
– A roof-rail airbag for the front outboard passenger and the passenger seated directly behind the front outboard passenger.

## Brakes

This vehicle is equipped with a Bosch ABS 9.0 brake system. The electronic brake control module (EBCM) and the brake pressure modulator valve are serviced separately. The brake pressure modulator valve uses a four circuit configuration to control hydraulic pressure to each wheel independently. Vehicles built with option RPO FX3 will feature stability enhancement.

- **Antilock Brake System (ABS):** When wheel slip is detected during a brake application, an ABS event occurs. During ABS braking, hydraulic pressure in the individual wheel circuits is controlled to prevent any wheel from slipping. A separate hydraulic line and specific solenoid valves are provided for each wheel. The ABS can decrease, hold, or increase hydraulic pressure to each wheel. The ABS does not, however, increase hydraulic pressure above the amount which is transmitted by the master cylinder during braking.
- **Brake Assist:** The brake assist function is designed to support the driver in emergency braking situations.

  The electronic brake control module receives inputs from the brake pressure sensor. When the electronic brake control module senses an emergency braking situation, the electronic brake control module will actively increase the brake pressure to a specific maximum.
- **Electronic Brake Distribution:** The electronic brake distribution function is designed to support the driver in emergency braking situations.

  The electronic brake distribution is a control system that enhances the hydraulic proportioning function of the mechanical proportioning valve in the base brake system. The electronic brake distribution control system is part of the operation software in the electronic brake control module. The electronic brake distribution uses active control with existing ABS in order to regulate the vehicle's rear brake pressure.
- **Electronic Stability Control (RPO FX3):** The electronic stability control adds an additional level of vehicle control to the electronic brake control module. The electronic stability control activations generally occur during aggressive driving, in turns or on bumpy roads without much use of the accelerator pedal. When braking during electronic stability control activation, the pedal pulsations feel different than the ABS pedal pulsations. The brake pedal pulsates at a higher frequency during vehicle stability enhancement system activation.
- **Traction Control:** When drive wheel slip is noted, the EBCM will enter traction control mode. First, the EBCM requests the engine control module (ECM) to reduce the amount of torque to the drive wheels via a serial data message. The ECM reduces torque to the drive wheels and reports the amount of delivered torque. If the engine torque reduction does not reduce drive wheel slip, the EBCM will actively apply the brakes on the slipping drive wheel. During traction control braking, hydraulic pressure in each drive wheel circuit is controlled to prevent the drive wheels from slipping. The EBCM commands the pump motor and appropriate solenoid valves **ON** and **OFF** to apply brake pressure to the slipping wheel.
- **Hill Start Assist:** When stopped on a hill, the hill start assist feature prevents the vehicle from rolling before driving off, whether facing uphill or downhill by holding the brake pressure during the transition between when the driver releases the brake pedal and starts to accelerate. The electronic brake control module calculates the brake pressure, which is needed to hold the vehicle on an incline or grade greater than 5% and locks that pressure for up to two seconds by commanding the appropriate solenoid valves ON and OFF when the brake pedal is released. The stop lamps will stay illuminated during the hill start assist operation even though the brake pedal is released, this is considered normal operation.

## Engine Stop/Start Operation (Automatic Transmission Only)

A fuel-saving stop/start system has been integrated with the 1.4L four-cylinder engine and automatic transmission. While driving, when the brake is applied and the vehicle is at a complete stop, the automatic engine stop/start system may turn **OFF** the engine, referred to as an Auto Stop. In Auto Stop mode, the tachometer gauge will read **AUTO STOP**. The audio

system, climate controls and other accessories will continue to operate. Upon releasing the brake pedal or applying the accelerator pedal, the engine will restart. After parking the vehicle and turning **OFF** the engine, the tachometer gauge will read **OFF**.

The engine may remain running or restart when the vehicle is stopped if:

- A minimum vehicle speed is not reached.
- The engine or transmission is not at the required operating temperature.
- The outside (ambient) temperature is not in the required operating range.
- The shift lever is in any gear other than Drive (D).
- The battery state of charge is low.
- The climate control system requires the engine to run based on the climate control or defog setting. Select the eco air conditioning setting (green A/C indicator) to maximize the frequency and duration of Auto Stops.
- The Auto Stop time is greater than 2 minutes.

## Hood Release (Double Pull)

The hood release is on the lower left side of the instrument panel between the door and the steering wheel. To open the hood:

1. Open the driver's door.
2. Pull the hood release handle.
3. Release the handle, then pull the handle again to fully open the hood.

## Keyless Access System

The Keyless Access System enables operation of the doors, ignition and trunk without removing the Remote Keyless Entry (RKE) transmitter from a pocket or purse. The transmitter must be within 3-feet (0.9 m) of a door or the trunk.

**Keyless Unlocking**

With the transmitter within range:

– Press the lock button on the driver's door handle to unlock the driver's door; press it again within 5 seconds to unlock all doors.

– Press the lock button on a passenger's door handle to unlock all doors.

– Press the touchpad above the license plate to open the trunk.

**Keyless Locking**

With the ignition **OFF**, the transmitter out of the vehicle, and all doors closed:

– Press the lock button on any door handle to lock all doors immediately.

– If Passive Locking is turned **ON**, all doors will lock automatically after a short delay once all of the doors are closed.

**Changing Settings**

To change the door lock and unlock settings, go to Remote Lock, Unlock, Start in the Vehicle Settings menu.

## Pushbutton Start

The Remote Keyless Entry transmitter must be in the vehicle to turn **ON** the ignition.

**Starting the Engine**

With the transmission in Park or Neutral, press the brake pedal (and clutch pedal, if equipped) and then press the **ENGINE START/STOP** button. The button indicator will be green.

⇒ If the transmitter battery is weak, place the transmitter in the front cupholder in the center console to enable the engine to start. Replace the transmitter battery as soon as possible.

**Stopping the Engine**

Shift to Park (automatic transmission) or 1st or Reverse (manual transmission) and press the **ENGINE START/STOP** button.

**Accessory Mode**

With the engine **OFF** and the brake pedal not depressed, press the **ENGINE START/STOP** button. The button indicator will be amber.

## Suspension/Chassis/Electric Power Steering

**Suspension/Chassis**

The all-new, more rigid and lighter architecture is constructed of about 8-percent hot-stamped/high-strength steels, which contributes to an approximately 27 percent stiffer body structure that is also 53 pounds (24 kg) lighter than the current Cruze. The Cruze's chassis system is perhaps the most mass-efficient in the segment. The new, more rigid architecture is the primary enabler for exceptional chassis tuning, affording more nimble and direct steering and handling attributes that foster driving confidence through precision. The longer wheelbase and wide front and rear tracks further contribute to a lower, wide footprint, which enhances agility and the feeling of control. Aluminum is used strategically in the suspension systems to optimize weight and handling characteristics.

Additional features include:

- A proven MacPherson strut front suspension design with specially tuned bushings and geometry intended to balance handling with comfort.
- A torsion beam rear axle on L, LS and LT models; and an enhanced Z-link design on Premier. It helps deliver a more balanced driving experience, as the rear suspension better follows the lead of the front suspension.

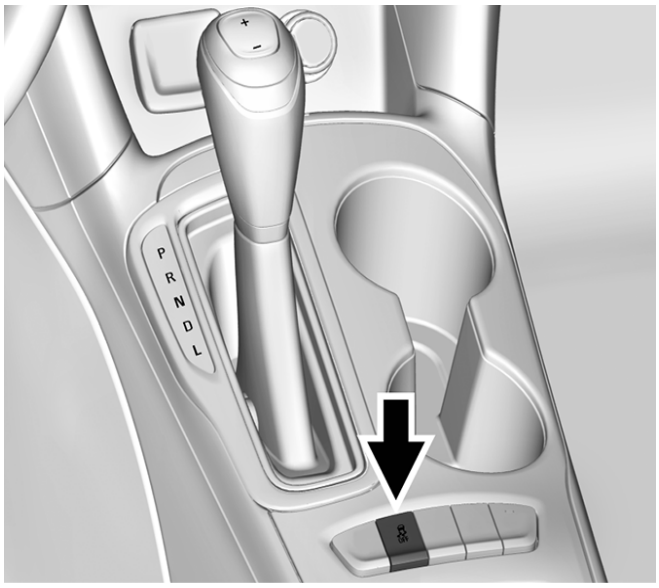
### Electric Power Steering

Rack-mounted electric power steering is standard on all models. Steering inputs are executed by the electric power steering system. It does not have power steering fluid. Regular maintenance is not required. If power steering assist is lost due to a system malfunction, the vehicle can be steered, but it may require increased effort. If the steering wheel is turned until it reaches the end of its travel and is held against that position for an extended period of time, power steering assist may be reduced. Normal use of the power steering assist should return when the system cools down.

## Traction Control and StabiliTrak®

The traction control system limits wheelspin and the StabiliTrak® stability control system assists with directional control of the vehicle in difficult driving conditions. Both systems turn **ON** automatically every time the vehicle is started. Turn **OFF** Traction Control if the vehicle is stuck and rocking the vehicle is required.

To turn **OFF** the systems:




4418631

- Press the **Traction Control/StabiliTrak Off** button on the center console to turn Traction Control **ON or OFF**.
- To turn **OFF** both TCS and StabiliTrak, press and hold the button until the **Traction OFF** light and **StabiliTrak OFF** light illuminate and stay **ON** in the instrument cluster.

### Indicator Light Operation

The indicator light for both systems is in the instrument cluster. This light will:

- Flash when TCS is limiting wheel spin.
- Flash when StabiliTrak is activated.
- Turn **ON** and stay **ON** when either system is not working.

If cruise control is being used and traction control or StabiliTrak begins to limit wheel spin, the cruise control will disengage. Cruise control may be turned back **ON** when road conditions allow.

## Driving Assistance Systems

If equipped, when driving the vehicle in a forward gear, Forward Collision Alert (FCA), Lane Departure Warning (LDW), Lane Keep Assist (LKA), Side Blind Zone Alert (SBZA), and/or Lane Change Alert (LCA) can help to avoid a crash or reduce crash damage.

- **Forward Collision Alert (FCA) System:** If equipped, the FCA system may help to avoid or reduce the harm caused by front-end crashes. When approaching a vehicle ahead too quickly, FCA provides a flashing red alert on the windshield and rapidly beeps. FCA also lights an amber visual alert if following another vehicle much too closely. FCA detects vehicles within a distance of approximately 197 ft (60 m) and operates at speeds above 25 mph (40 km/h).
- **Side Blind Zone Alert (SBZA):** If equipped, the SBZA system is a lane-changing aid that assists drivers with avoiding crashes that occur with moving vehicles in the side blind zone (or spot) areas. When the vehicle is in a forward gear, the left or right side mirror display will light up if a moving vehicle is detected in that blind zone. If the turn signal is activated and a vehicle is also detected on the same side, the display will flash as an extra warning not to change lanes. This system is part of the Lane Change Alert (LCA) system.
- **Lane Change Alert (LCA):** If equipped, the LCA system is a lane-changing aid that assists drivers with avoiding lane change crashes that occur with moving vehicles in the side blind zone (or spot) areas or with vehicles rapidly approaching these areas from behind. The LCA warning display will light up in the corresponding outside side mirror and will flash if the turn signal is **ON**.
- **Lane Departure Warning (LDW):** If equipped, LDW may help avoid crashes due to unintentional lane departures. It may provide a warning if the vehicle is crossing a detected lane marking without using a turn signal in the lane departure direction. This system is part of the Lane Keep Assist (LKA) system.
- **Lane Keep Assist (LKA):** If equipped, LKA may help avoid crashes due to unintentional lane departures. ***It may assist by gently turning the steering wheel*** if the vehicle approaches a detected lane marking without using a turn signal in that direction. It may also provide a Lane Departure Warning (LDW) system alert as the lane marking is crossed. The LKA system will not assist or provide an LDW alert if it detects that you are actively steering. Override LKA by turning the steering wheel. LKA uses a camera to detect lane markings between 37 mph (60 km/h) and 112 mph (180 km/h).

## Chevrolet MyLink™


4418753

Chevrolet MyLink™ uses a Bluetooth® or USB connection to link to a compatible device, such as a smartphone, cell phone, USB flash drive or portable audio player such as an Apple® iPod®.

1. **VOL** ON-OFF Power/Volume
2. **Applications** Touch the screen icon to access the application
3. **Interaction Selector** Display pages of favorite radio stations
4. **MENU** Tune radio stations/Open and select menus
5. **RADIO** Select AM/FM/SiriusXM
6. **MEDIA** Select the media source
7. **SEEK** Previous/Next radio station or track
8. **BACK** Move back one level in the menus
9. **HOME** Home Page

**See Infotainment System in the Owner Manual.**

### Android Auto™ and Apple CarPlay™

If equipped, Android Auto™ and/or Apple CarPlay™ capability may be available through a compatible smartphone. If available, a PROJECTION icon will appear as Android Auto™ or Apple CarPlay™ on the Home Page of the infotainment display.

To use Android Auto and/or Apple CarPlay:

1. Android Auto is built around Google Maps, Google Now and the ability to talk to Google, as well as a growing audio and messaging app ecosystem that includes WhatsApp, Skype, Google Play Music, Spotify and podcast players. A full list of supported apps is available at g.co/androidauto. Android Auto requires a phone running an Android Lollipop 5.0 operating system or higher. Download the Android Auto app to your phone from the Google® Play store.
2. Apple CarPlay-supported apps include Phone, Messages, Maps, Music and compatible third-party apps. A full list of those apps can be found at Apple.com/ios/carplay. Apple CarPlay is compatible with iOS 7.1 or higher. In Canada visit Apple.com/ca/ios/carplay/ (Canada English) or Apple.com/ca/fr/ios/carplay (Canada French).
3. Connect your Android phone or Apple iPhone by using the compatible phone USB cable and plugging it into the a USB data port. For best performance, use the device's factory-provided USB cable. Aftermarket or third-party cables may not work.

The PROJECTION icon on the Home Page will change to Android Auto or Apple CarPlay depending on the phone. Android Auto and/or Apple CarPlay may automatically launch upon USB connection. If not, press the ANDROID AUTO and/or APPLE CARPLAY icon on the Home Page to launch.

**Note: Full Functionality requires Bluetooth and smartphone. Some devices require USB connectivity. Data plan rates apply.**

## OnStar® with 4G LTE and Wi-Fi

With OnStar® 4G LTE and Wi-Fi®, up to seven devices (smartphones, tablets and laptops) can be connected to high-speed Internet through the vehicle's built-in Wi-Fi hotspot.

To retrieve the SSID and password for the hotspot, press the OnStar® Voice Command button on the overhead console or rearview mirror, wait for the prompt, and then say "Wi-Fi settings." The information will be displayed on the screen.

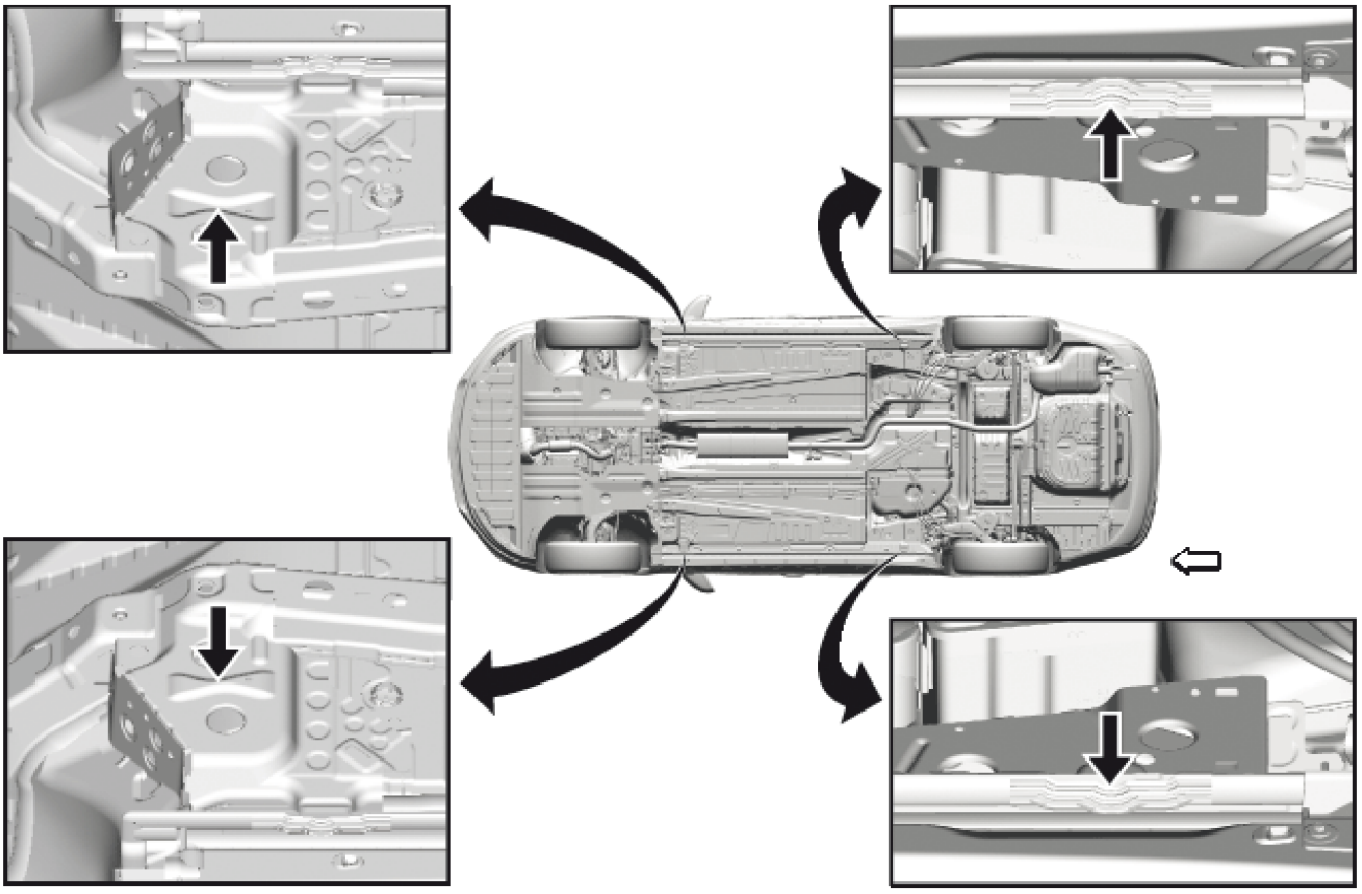
The powerful OnStar® connection also enables improved access to existing OnStar® safety and security services, including the ability to transmit voice and data simultaneously. That means OnStar® advisors can run a diagnostic check without ever leaving the call, making customer interactions quicker and more seamless. It's the most comprehensive in-vehicle safety and connectivity system available.

For assistance, press the blue OnStar® button or call 1-888-4-ONSTAR (1-888-466-7827).

## Vehicle Lifting

**Note: The use of a LOW PROFILE LIFT ARMS SYSTEM may be required to avoid unwanted contact with the vehicle's body and structure depending on lifting equipment used. Refer to the manufacture's recommendation for their applications of low profile lift arms system for their lifting equipment.**

**Vehicle Lifting - Frame Contact Lift**



4412801

- **Front Lift Pads:** When lifting the vehicle with a frame-contact lift, place the front lift pads on the underbody front side rail outrigger, as shown.
- **Rear Lift Pads:** When lifting the vehicle with a frame-contact lift, place the rear lift pads on the rocker outer panel weld flange, as shown.

**Vehicle Lifting - Service Jack**

When using a service jack under the front or rear of the vehicle, use the same location that is shown for the front and rear lift pads.

## Wireless Charging

The Wireless Charging system is located in a pocket on the center console. To check device compatibility, visit **my.chevrolet.com/learn**. In Canada, visit gmtotalconnect.ca/wireless-charging (English) or connexiontotalegm.ca/wireless-charging/ (French). See your phone retailer for details on required phone accessories.

**Charging a Device**

To charge a device:

1. The vehicle must be **ON** or Retained Accessory Power must be active.
2. Remove all objects from the charging pocket.
3. Place the device in the pocket with the screen facing the rear of the vehicle.
4. The charging symbol will display on the infotainment screen when the device is charging.

## Towing the Vehicle — Recreational Vehicle Towing

**Caution: DO NOT lash or hook to suspension components. Use the proper straps around the tires to secure the vehicle. Improper use of the tow eye can cause vehicle damage. Use caution and low speeds to prevent damage to the vehicle.**

### Towing the Vehicle

Have the vehicle towed on a flatbed car carrier or a wheel lift tow truck. If a wheel lift tow truck is used, ***the drive wheels cannot contact the road*** while the vehicle is being towed. A wheel dolly must be used to lift the drive wheels off the ground. Use the tow eye for towing a disabled vehicle or loading it onto a flatbed car carrier. ***The tow eye should not be used to recover a vehicle from an off road situation.***

### Recreational Vehicle Towing

Recreational vehicle towing means towing the vehicle behind another vehicle, such as behind a motor home. The Cruze was not designed to be towed with all four wheels on the ground. If the vehicle will be towed a ***dolly must be used*** under the front wheels.

### Dolly Towing

Dolly towing is towing the vehicle with two wheels on the ground and two wheels up on a device known as a dolly. Tow the vehicle with the two rear wheels on the ground and the front wheels on a dolly.

To tow the vehicle with two rear wheels on the ground and a dolly under the front wheels, perform the following:

1. Put the front wheels on a dolly.
2. Put the shift lever in **P** (Park) or a manual transmission into 1 (First) gear.
3. Set the parking brake.
4. Clamp the steering wheel in a straight-ahead position with a clamping device designed for towing.
5. Remove the key from the ignition.
6. Secure the vehicle to the dolly.
7. Release the parking brake.

## Training Courses

The majority of the systems found on this vehicle are taught in GM's core curriculum from a conceptual theory and operation perspective. The North American technical training core curriculum structure is system based.

To access **all** of the available training courses visit the following website: **Go to > www.centerlearning.com**

### Training Course Name or System — Course Number and Description

| Course Name or System | Course Number and Description |
|---|---|
| **New Model Feature**<br>2016 Chevrolet Cruze New Model Feature | #10316.95W — 2016 Cruze New Model Feature |
| **Engine**<br>1.4L Turbocharged — RPO LE2 | #16440.20D VCT and #16440.20D-V Video — Engines: New and Updates for RPOs LF4 LGX LGW L3A LV7 LE2 LWN LWC (United States Only)<br>#16043.07D Small & Medium Gas Engine Families (Canada Only) |
| **Transmission**<br>Hydra-Matic™ 6T35 6-Speed Automatic Transaxle — RPO MNU<br>M32 6-Speed Manual Transaxle — RPO MF3 | #17041.52V 6-Speed Auto Video — Video On Demand (VOD)<br>#17041.56W1-W3 Automatic Transmission Operation, Diagnosis and Service 1-3 WBT<br>#17041.56H Automatic Transmission Operation, Diagnosis and Service ILT (United States Only)<br>#17041.65H-R2 6-Speed Automatic Transmission Mechanical Service ILT (United States Only)<br>#17043.38W1-W4 Manual Transmission FWD/RWD Operation, Diagnosis and Service 1-4 WBT |
| **Safety Systems** Forward Collision Alert / Lane Departure Warning and Rear Vision Camera | #22048.42W1-W3 GM Safety Systems 1-3 |

## Version Information

| | |
|---|---|
| **Version** | 3 |
| **Modified** | April 4, 2016 – Adding a Section for: Hood Release (Double Pull)<br>May 5, 2016 – Revise the Front and Rear Lift Pad Text Information in Section > Vehicle Lifting > Subsection > Vehicle Lifting - Frame Contact Lift |

## Trademark Footnotes

**Android™ is a Trademark of Google Inc.**

**Android Auto™ is a Trademark of Google Inc.**

**Apple® is a Registered Trademark of Apple Inc.**

**Apple CarPlay™ is a Trademark of Apple Inc.**

**Bose® is a Registered Trademark of the Bose Corporation**

**The Bluetooth® Word Mark and Logos are Registered Trademarks Owned by Bluetooth SIG, Inc.**

**Chevrolet MyLink™ is a Trademark of General Motors LLC**

**dexos® is a Registered Trademark of General Motors LLC**

**dexos1® Icons are Registered Logos of General Motors LLC**

**DEXRON® is a Registered Trademark of General Motors LLC**

**Duralife™ is a Trademark of General Motors LLC**

**Google® is a Registered Trademark of Google Inc.**

**Hydra-Matic™ is a Trademark of General Motors LLC**

**iPhone® is a Registered Trademark of Apple Inc.**

**Intellibeam® is a Registered Trademark of General Motors LLC**

**OnStar® is a Registered Trademark of OnStar LLC**

**Rainsense™ is a Trademark of General Motors LLC**

**Siri® Eyes Free Voice Recognition Software is a Registered Trademark of Apple Inc.**

**Siri® is a Registered Trademark of Apple Inc.**

**StabiliTrak® is a Registered Trademark of General Motors LLC**