

SERVICE

# IN SIGHTS

FALL 2025

*Service Repair News  
From Your Parts Supplier*

Getting Your  
Bearings

Ready Struts  
Expand

Low Voltage  
High Impact



# LUXURY

FOR YOUR LIFE

FIRST-EVER ALL-ELECTRIC 2026 VISTIQ



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## SERVICE

# IN SIGHTS

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# The GOLD Standard

Introduction of new bearing applications underscores strength of product

This past summer, ACDelco announced the addition of 80 new bearing applications under the Gold brand. Notable in that announcement is the number of non-GM applications being introduced.

ACDelco Gold bearings offers customers a high-quality alternative to OE parts at an attractive price point. The parts include wheel, ball, clutch-release and hanger bearings; hub assemblies and spindle kits; and bearing seals. They not only are designed with the fit, form and function of the vehicle in mind but the brake and steering systems which within they work.



## More Than Tolerant

In fact, being manufactured to precise tolerances helps ACDelco Gold bearings provide impressive braking and steering performance. Rolling surfaces are induction heat-treated to create a case-hardened pattern that enhances strength and reliability.

### Did You Know?

All ACDelco Gold bearings come with a 24-month/unlimited-mile warranty.\* Visit [acdelco.com](https://www.acdelco.com) to learn more about the whole range of ACDelco products.

In addition, precision-ground raceways help ensure smooth and quiet operation.

High-quality materials play an important role as well. ACDelco Gold bearings are made of an ultra-low contaminant steel that contains fewer inclusions than regular bearing steel for reduced fatigue spalling. The steel is also heat-treated and engineered to withstand a variety of demanding driving conditions.

The use of cold-headed, high-strength-steel wheel bolts contribute to the durability factor, and the Gold-branded hub assemblies feature an advanced formulated grease that is engineered to withstand high-operating temperatures and loading. Adding to this protection are ACDelco Gold bearings' multi-lip design and extreme-temperature seal materials, which provide a formidable barrier to water and contaminants. ■

### Scan This QR Code



for a video that focuses on when to potentially replace ACDelco Gold bearings.

\*Effective on parts purchased January 1, 2021, and later to the original retail purchaser. Contact seller for limited warranty part details, qualifications, and possible labor coverage.



# Ready for **ACTION**



## GM-BACKED LIMITED WARRANTY

ACDelco Gold Ready Struts are backed by GM with a 24-month/unlimited-mile limited warranty.\*

## ACDelco Gold struts respond to the road

As with GM Gold bearings, ACDelco also expanded its portfolio of Ready Strut product applications. In fact, 204 new offerings have been added – including a wide range of non-GM applications. This means a broader spectrum of cars, trucks and SUVs can take advantage of this durable, convenient-to-install part.

### Full Assembly

Ready Struts come equipped as a complete assembly, meaning they include the upper strut mount, bearing, jounce bumper, strut boot, coil spring, spring isolator and MacPherson strut or coil-over shock with spring seat.

In addition, this preassembled unit has the vehicle-mounting points and brake-hose brackets already placed in their proper locations. This assembly, along with the fact that Ready Struts do not require any additional parts or special tools, makes for an easier and safer installation. For most repairs, the preassembled unit can save up to 1.5 hours of installation time compared with traditional struts.

### Built to Last

Along with convenience, Ready Struts boast durability built with thorough real-world testing. They

undergo multiple component and unit tests designed to gauge structural integrity and resilience. For example, Ready Struts go through the industry-standard ASTM-B117 salt-spray test, where they regularly exceed requirements after being subjected to numerous hours of salt spray.

The construction of Ready Struts also contribute to their effectiveness, with chrome-plated steel piston rods and a durable paint finish to help combat rust and corrosion. Plus, the DOM pressure tube provides a smooth surface to

optimize durability, reduce wear and extend product life.

ACDelco Gold Ready Struts are backed by GM with a 24-month/unlimited-mile limited warranty,\* providing customers with the assurance they're getting a long-lasting, high-quality alternative to GM OE parts. ■



Scan this QR code for information on ACDelco's full line of steering and suspension parts.

\*Effective on parts purchased January 1, 2021, and later to the original retail purchaser. Contact seller for limited warranty part details, qualifications and possible labor coverage.



# The HEAD of the CLASS

Cadillac VISTIQ makes the grade with a combination of power, luxury and style

The 2026 Cadillac VISTIQ is not just another electric vehicle: It's a three-row game changer, set to redefine luxury in the electric vehicle market. With its unique blend of performance, technology and elegance, the VISTIQ is Cadillac's first all-electric, three-row SUV, offering a premium driving experience.

The spacious, well-appointed latest addition to Cadillac's EV lineup presents a range of benefits rivaling what competitive EV vehicles can now achieve out on the road. Here are just some of the advantages the VISTIQ offers owners.



Cadillac 2026  
VISTIQ Platinum



## Showing Range

Under the hood, the VISTIQ boasts dual-motor all-wheel drive that delivers a remarkable 615 horsepower and 650 lb.-ft. of torque. With Velocity Max, the VISTIQ can accelerate from 0-60 mph in just 3.7 seconds.<sup>1</sup> Complementing this impressive performance is a responsive sport suspension with Continuous Damping Control, which uses sensors to adjust shock absorbers based on varying road conditions. Note: Air Ride Adaptive Suspension and Active Rear Steering are available.

The vehicle is equipped with a 102-kWh battery, providing an EPA-estimated range of up to 305 miles on a single charge.<sup>2</sup> Helping extend that range on the VISTIQ is Regenerative Braking, which captures and conserves braking energy.



## Comfort Mood

The exterior features modern, captivating, choreographed lighting and sleek lines designed to turn heads wherever VISTIQ goes. Inside, the VISTIQ offers seating for up to seven passengers across three rows, with the combination of standard massaging, heated, ventilated and 18-way power-adjustable seats. The VISTIQ offers an EV segment-best intelligent 5-zone climate control. The interior is adorned with high-quality materials and advanced technology, including a 33-inch diagonal advanced LED display with Google built-in<sup>3</sup> compatibility.

Continued on next page >

<sup>1</sup> On a closed course only. Based on Initial Vehicle Movement (IVM). <sup>2</sup> When equipped with 11.5 kW onboard charging module. On a full charge. Actual range may vary based on several factors, including ambient temperature, terrain, battery age and condition, loading, and how you use and maintain your vehicle. <sup>3</sup> Google built-in services are subject to limitations and availability may vary by vehicle, infotainment system, and location. Select service plan required. Certain Google actions and functionality may require account linking. User terms and privacy statements apply. Google, Android™, Google Play, Google Maps and other marks are trademarks of Google LLC.



Continued >

The 23-speaker AKG<sup>4</sup> Studio audio system, with available Dolby Atmos<sup>®</sup>, ensures an immersive sound experience for all occupants. Tri-Zone Ambient Lighting, with 126 color options, allows owners to accent — and personalize — areas around the footwells, doors and sunroof. Heated, ventilated and massaging front seats enhance comfort, making long drives more enjoyable.

### The Road Ahead

The VISTIQ is packed with cutting-edge technology to enhance the driving experience. Cadillac's Super Cruise<sup>®</sup>

hands-free driver assistance technology comes standard,<sup>5</sup> helping to make long drives and commutes more comfortable and convenient with hands-free operation.<sup>6</sup> The vehicle also features HD Surround Vision, providing a comprehensive view of the surroundings to aid in parking and maneuvering. And with available Night Vision, drivers can see beyond their headlamps to detect pedestrians or large animals directly ahead.<sup>7</sup>

Another technology feature that provides foresight is the available Augmented Reality Head-Up Display, which projects real-time display information on two

viewing planes to provide information to the driver where it's most helpful and intuitive, such as navigational and directional cues, speed and more.

### Choose Your VISTIQ

The VISTIQ comes in four trim levels, including Luxury, Premium Luxury, Sport and Platinum. Each trim offers unique features, including 22" Diamond Cut Wheels with High Gloss Black-finish spokes and a 19.2 kW AC Charging module on the Premium Luxury model. There are

Brembo<sup>®</sup> brakes with Black calipers and Cadillac script, along with Platinum front and rear lower fascia on the Platinum model.

Every VISTIQ model delivers an impressive 80.2 cubic feet of cargo space behind the front seats.<sup>7</sup> As a result, first- and second-row passengers enjoy more than 40 inches of legroom, with third-row riders still receiving almost 31 inches of movement, and segment-best headroom and shoulder room. ■



Scan the QR code to learn more about the 2026 Cadillac VISTIQ.



Cadillac 2026 VISTIQ Premium Luxury

4. AKG is a trademark of AKG Acoustics GmbH, registered in the United States and/or other countries. 5. Standard with 3-year OnStar One plan<sup>†</sup> and disclosure: OnStar<sup>®</sup> plan, working electrical system, cell reception and GPS signal required. OnStar links to emergency services. Not all vehicles may transmit all crash data. Service coverage varies with conditions and location. Service availability, features and functionality vary by device and software version. Always pay attention while driving and when using Super Cruise. Do not use handheld device. Visit [cadillac.com/supercruise](https://www.cadillac.com/supercruise) for Super Cruise compatible roads and full details. Subject to user terms. See [onstar.com](https://www.onstar.com) for details and limitations. 6. Turn Signal-Initiated Lane Change and Automatic Lane Change not available while trailering. Always pay

attention while driving and when using Super Cruise. Do not use a hand-held device. Requires active Super Cruise plan or trial. Terms apply. Visit [cadillac.com/supercruise](https://www.cadillac.com/supercruise) for compatible roads and full details. 7. Safety or driver assistance features are no substitute for the driver's responsibility to operate the vehicle in a safe manner. The driver should remain attentive to traffic, surroundings and road conditions at all times. Visibility, weather, and road conditions may affect feature performance. Read the vehicle Owner's Manual for more important feature limitations and information. . Cargo and load capacity limited by weight and distribution.



**T**he 2024 Corvette E-Ray marks a significant evolution in Corvette engineering by integrating two lithium-ion batteries – one for high-voltage propulsion and another for low-voltage operations. This low-voltage battery, known as the 12V LiB, replaces the traditional lead-acid battery found in other Corvette models and plays a critical role in the vehicle's hybrid functionality.

### A Smarter 12V System

Unlike conventional 12V lead-acid batteries, the E-Ray's 12V LiB supports advanced features such as a “flying start” for the 6.2L V8 engine when transitioning out of Stealth mode. The 12V LiB is charged by the K1 14V Power Module during electric-only driving modes (Stealth and Shuttle) and by the generator once the internal combustion engine takes over.

### Intelligent Battery Protection

The 12V LiB includes internal contactors that function as safety switches, opening when voltage, current or temperature exceeds critical limits. These contactors undergo a self-test every time the vehicle powers down, completing within five seconds. The battery communicates with the K9 Body Control Module (BCM) via a Controller Area Network (CAN) and displays voltage status on the instrument cluster. Diagnostic data can be accessed using GDS2 through the K244 Battery Management Control Module.

### Programming and Maintenance

Stable voltage is essential during SPS (Service Programming System) events. Older battery maintainers may not recognize the 13.3V resting voltage of the LiB and fail to supply current, causing the battery to drain and the contactors to open mid-programming.

GM recommends using only approved chargers such as the Midtronics MSP-070 or E-XTEQ 512EVO series.

### Charging and Testing Guidelines

Due to the nature of lithium ion, external load testing is ineffective and not recommended by GM. However, charging is permitted using an approved charger such as the Midtronics DCA-8000, provided correct settings are used. The battery should never be charged above 14.4V. If the contactors are open, there will be less than 2V at the battery posts.

### Battery Replacement Protocol

Degradation of the 12V LiB is less apparent compared to lead-acid batteries and it may suddenly appear dead if the contactors prevent power delivery.

When replacing the 12V LiB, the High-Voltage Service Lockout (HVSL)

## OPERATING THRESHOLDS



## FAULT CONDITIONS

**The battery is designed to protect its four series cell sets under various conditions:**

must be engaged before disconnecting the battery due to its integration with the high-voltage system. This ensures technician safety and prevents accidental re-engagement.

The 2024 Corvette E-Ray's 12V lithium-ion battery system exemplifies the vehicle's cutting-edge hybrid technology. With intelligent safety features, advanced diagnostics and strict maintenance protocols, it represents a leap forward in low-voltage vehicle electrification. ■

**Over Voltage:** Contactors open if any cell exceeds 4.0V (typically above 14.5V total).

**Under Voltage:** The relay will open if any cell drops below 2.5 volts for several minutes, which may occur when the battery is discharged to a voltage below 11 volts. The relay can be closed under normal conditions by applying greater than 12.5V to the battery terminals followed by a charge using an approved charger.

**Severe Discharge:** If the battery is severely discharged – any cell drops to 1.5 volts – it will set a critical low voltage and end-of-life fault, and the relay will not close again.

**Over Current:** Opens above 2,000 amps due to short circuits. The relay can be closed under normal conditions by applying greater than 12.5V to the battery terminals using an approved charger.

**Over Temperature:** The relay will open if an over-temperature condition occurs, in which the internal temperature exceeds 185°F (85°C). The relay will close once the temperature drops below 176°F (80°C).

**End of Life:** The relay will open if the battery determines it can no longer safely support the vehicle objectives. In this state, the terminals can never be re-connected to the cells and the battery needs to be replaced.

12V LiB battery  
provides a boost  
for Corvette E-Ray

Selling LOW





# Taking Care of Business

## GM Business Card rewards shops for their parts purchases

To learn more about the card, including how to apply for one, scan this QR code.



For years, consumers have recognized the power of the GM Rewards Mastercard to make purchases and build up points for a new vehicle, parts or accessories, or service.

Now, businesses have the same opportunity to make their purchases work for them with the GM Business Mastercard, which offers many of the same benefits as the consumer card.

The GM Business Mastercard allows purchasers to earn seven times the points for every dollar spent on

The GM Business Mastercard

Allows purchasers to earn

7 times

the points for every dollar spent on eligible GM card purchases.\*

eligible GM card purchases,\* and three times the points for all other transactions. There

are no limits to the amount of points earned,

points don't expire until seven years of inactivity and cardholders don't have to pay an annual fee.

There is special financing for qualifying purchases\* – an introductory 0% APR for nine months on purchases greater than \$499 made within the first 30 days of opening an account. Businesses also have the ability to add cards for up to 74 employees, and even establish spending limits for those individuals. ■

\*Qualifying GM purchases include new or certified pre-owned vehicles or customer-paid Certified Service at a GM dealership, GM Genuine and ACDelco parts purchased at a GM dealership or online through GM websites, GM Accessories purchased at a GM dealership or online through GM websites, SiriusXM transactions, GM Energy purchases, General Motors Company Store purchases, General Motors Insurance purchases and OnStar transactions as determined by the merchant identification number(s) provided by GM.

# Level Set



Recalibration of front-view camera is a relearning process

## Front-View Camera – Windshield Learn

Performing the calibration process for the front-view camera system is necessary when a front-view camera module is replaced by a new one as well as whenever the module is removed from its bracket, or the windshield glass has been replaced and the front-view camera module is properly mounted again. Any maintenance, repair or part replacement that affects the vehicle's ride height will also require recalibration of the front-view camera.

Following the Front-View Camera Learn directions displayed on the scan tool, the calibration process can be completed within 3 to 5 minutes when the correct driving conditions are met (clear lane markings, clean windshield, vehicle speeds maintained between 35–56 mph). If these conditions are not met, the front-view camera module will continuously run the service-point calibration until it is successfully completed. The calibration will work across ignition cycles and does not require re-initialization at startup.

If the Lane Departure Warning switch is pressed during calibration, the indicator will flash momentarily and then stay out – this is regular operation. ■

Following a collision, numerous vehicle subsystems – particularly those related to advanced driver-assistance systems (ADAS) – may require recalibration or the execution of a system “relearn” procedure. Let's examine one such subsystem commonly encountered in automotive repair environments.

! View SI Doc ID 5344006 for the step-by-step procedure.



# Go With the Flow

**ACDelco OE and Gold oil filters** undergo design change for better performance

Service technicians may notice a slightly different look to the OE and ACDelco Gold oil filters as the product undergoes a redesign in which the full-face gasket retainer is removed and the hole size increased in the threaded backplate.



The idea for the change is for oil pressure to build more quickly at engine startup and allow for greater oil flow during hard acceleration and high RPM events, which will better protect critical engine bearing surfaces from wear. There will be no changes to the overall height or diameter of the filter.

Some filters already have transitioned to the new design, while others are scheduled for the coming months. (See the QR code below for a list for parts that currently or will soon sport the new design.) Because this is currently a running design change, current inventoried oil filters don't need to be returned and will be suitable for use. The goal is to complete the transition by Q3 2026. ■



**Scan this QR code**

for a list of OE and ACDelco Gold oil filters that feature the new high-flow design.

## MAKING GOOD CONNECTIONS

Intermittent faults may be due to faulty wiring and corroded terminals

When a Diagnostic Trouble Code (DTC) is recorded in history, but the corresponding condition is not currently active, the issue may be intermittent faults. These should also be considered when a customer concern cannot be duplicated during diagnostic testing. These types of faults are frequently attributed to compromised electrical connections or wiring integrity.

To diagnose potential causes, perform a thorough inspection for the conditions listed on the right. ■



View SI Doc ID 5207120 for details on how to fully complete testing.

- ✓ **Loose, corroded or painted** terminal stud/fastener
- ✓ **Broken wiring** inside the insulation
- ✓ **Poor connection** between the male and female terminals at a connector
- ✓ **A terminal not seated** all the way into the connector body
- ✓ **Poor terminal-to-wire connection**; some conditions that fall under this description include poor crimps, poor solder joints, crimping over the wire insulation rather than the wire itself and corrosion in the wire-to-terminal contact area.
- ✓ **Pierced or damaged insulation** can allow moisture to enter the wiring, causing corrosion. The conductor can corrode inside the insulation, with little visible evidence of the damage. Look for swollen and stiff sections of wire in the suspect circuits.
- ✓ **Wiring that has been pinched or cut**, or its insulation rubbed through, may cause an intermittent open or short as the bare area touches other wiring or parts of the vehicle.
- ✓ **Wiring that comes in contact** with hot or exhaust components