From hauling equipment on the work site to driving in the neighborhood, GEM battery-electric vehicles are perfect for short-distance transportation.

With six models - three passenger models and three utility models - and a variety of options to choose from, it’s easy to customize a GEM car to meet your driving needs.

GEM cars are an economical, eco-friendly, and fun alternative to gasoline-powered vehicles. Operating costs of a GEM car are only about two cents per mile making it an affordable and efficient way to get where you need to go.

The GEM car’s automotive-designed components offer performance and durability with the benefit of being 100% battery-electric with zero emissions. Test drive a 2009 GEM car today and discover the power of electric driving.
Ready, Set, Unplug, and Go!

Classified as low-speed vehicles, or neighborhood electric vehicles, by the National Highway Traffic Safety Administration (NHTSA), GEM cars are **street-legal** in nearly all 50 states on most public roads posted at 35 mph or less.

With a **top speed of 25 mph** and a **range of up to 30* miles** on a charge, GEM passenger and utility vehicles are ideal for driving on campuses, work sites, or just around the neighborhood.

GEM models can conveniently be plugged into a **110-volt outlet to recharge**. In six to eight hours, your GEM car is fully recharged and back on the road!

*A Range will vary depending on temperature, terrain, driving style, or vehicle payload.

A Unique Driving Experience

GEM cars have a curved, open design that protects passengers from the elements without completely closing them in. The unique shape offers **47 to 109 cubic feet of cab space** depending on vehicle model, and with the vehicle’s mini-van height it’s easy to see and be seen while driving.

Another great aspect about GEM battery-electric vehicles is that their compact size makes parking and maneuvering a breeze. GEM cars are **easy to drive** - just turn the key and go. It’s that simple!
**An Eco-Friendly Choice**

With fluctuating gas prices and environmental concerns becoming more prevalent each day, GEM cars are a perfect solution for your short-distance transportation needs. GEM cars are **100% battery-electric** and emit **zero tailpipe emissions**. They can be driven outdoors, inside buildings, and on campuses because they’re clean and quiet.

Since they’re eco-friendly, **tax credits** and financial incentives may be available for the purchase of your GEM car. Check with your federal, state, and local government for specific details. No matter what GEM model you choose, you’ll experience the environmental benefits of driving a battery-electric vehicle!

**Energy-Efficient Plus Economical**

Imagine spending just **two cents per mile** to operate a vehicle that can take you most places you need to go on your work site, campus, or in the neighborhood. In fact, for about $1.00 of electricity you can drive 50 miles in a GEM car. Show us a gasoline-powered vehicle that can match that savings!

And, GEM cars are **low maintenance**. The cost of ownership is just one-third that of a comparable gasoline-powered vehicle because oil changes and other related expenses are eliminated. Just imagine never having to stop at a gas station or wait for an oil change. All while helping to save the environment.
safe Each of the six GEM models meets the federal safety standards for low-speed vehicles (LSVs). All GEM cars are equipped with standard automotive safety windshield glass, three-point safety belts, turn signals, halogen headlamps, brake lights, horn, adjustable mirrors, and windshield wipers.

well-built GEM cars are performance-tested on the same facilities and with the same resources as major automobile manufacturers at the Arizona Proving Grounds, by top automotive engineers. With hundreds of thousands of miles accumulated on GEM test vehicles, you can be assured that safety and reliability are top priorities.

american GEM battery-electric vehicles are assembled at the Global Electric Motorcars corporate headquarters in Fargo, North Dakota. GEM cars qualify as a U.S. product under the Buy American Trade Agreement Act.

▶ 38,000
the number of GEM cars that have been placed in service since 1998
multi-purpose  GEM cars are being driven on college campuses, in neighborhoods, city centers, gated communities, resorts, sports stadiums, and national parks. Police departments and military installations also use GEM cars to conduct routine security checks and complete work tasks more efficiently.

fun   GEM cars can be used for many applications - both work-related and recreational - including running errands, commuting to work or school, visiting family and friends, hauling equipment, transporting people, grounds maintenance, patrolling parking lots, or for business services.

versatile  With a variety of options to choose from, you can customize your GEM car to suit your needs. From a lockable TrunkBack™ for shopping, a StakeBack Kit™ for hauling equipment, to three types of doors, the GEM line of vehicles offers the largest selection of options in the low-speed vehicle industry. You can also purchase a fast charger that allows you to completely recharge your GEM car in less than an hour.

increase your versatility

“From giving visitors tours of our community to providing transportation to guests at events, our GEM is a very useful and economical vehicle. It’s perfect for our needs: clean, quiet, convenient, and fun.”

-S. Guffey, Schroeder-Manatee Ranch, Inc.
durable GEM cars are constructed using a welded aluminum space-frame and thermo-formed ABS plastic body panels, which contribute to the vehicle’s durability and performance by reducing weight without sacrificing strength.

dependable Each GEM model has an independent front suspension system and rack-and-pinion steering to improve vehicle control and stability. The vehicle’s front-wheel disc brakes and rear-wheel hydraulic drum brakes ensure your ability to stop safely. In addition, regenerative braking improves the vehicle’s driving range by recharging the batteries.

adaptable Both GEM passenger and utility models perform well in most climates. Doors, heated seats, and heater/defogger are just some of the options that can be added to your vehicle for cooler climates with minimum impact on range.

12.5 million
the number of gallons of gas saved by GEM cars over the past ten years
**GEM eS**
starting at $8,495 MSRP

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**economical**  For about $1.00, you can drive 50 miles in a GEM car, or the equivalent of 150 miles per gallon. That’s about two cents per mile. Combine low “fuel” costs, low maintenance costs, and an affordable purchase price, and the GEM car is the best in its class for short-distance, task-oriented driving.

**low maintenance**  GEM cars are low maintenance, especially when compared to gasoline-powered vehicles. There are no oil changes and no tune-ups. Just plug your GEM car into a 110-volt outlet to recharge and check your tires and brake fluid occasionally.

**leading-edge technology**  GEM proprietary power management systems (battery, efficiency, and vehicle control systems) coupled with the inherently-efficient electric drive train, make GEM cars the highest quality low-speed electric vehicles on the market. That’s another reason why Global Electric Motorcars is the market leader in low-speed vehicles.

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“The operating cost of a GEM car is about two cents a mile. When you add that up over a commute and you add a commute up over a year, that’s hundreds of dollars.”

-C. Congleton, Transportation Researcher - UC Davis
eco-friendly Because they’re 100% battery-electric, GEM cars don’t emit any tailpipe emissions like gasoline-powered vehicles do.

efficient Facility personnel benefit from using GEM cars because they can drive them underground and indoors, thereby increasing productivity. GEM cars may also help you qualify for Leadership in Energy and Environmental Design (LEED) certification.

convenient Your new GEM car comes with a 12-month limited warranty, which includes protection against major mechanical breakdowns, 24-hour roadside assistance, and towing services. Extended service coverage for an additional 12- or 24-months may also be available for purchase.

▲ 150 tons
the amount of ozone precursors eliminated by the 38,000 GEM cars in service
**GEM eL XD**
starting at $11,495 MSRP

**capable**  Each GEM model offers superior performance and provides the ability to haul equipment or transport people. GEM cars have payload capacities ranging from 680 to 1,450 pounds and are capable of carrying large or heavy items on the job site or around your neighborhood.

**comfortable**  An ergonomic-design, mini-van height, and marine-grade vinyl seat coverings, coupled with an automotive suspension provide a smooth, roomy, and comfortable ride.

**extra-duty**  GEM cars feature a heavy-duty DC motor with a continuous 5 horsepower rating and a 12 horsepower peak during acceleration and hill climbing. For increased performance, the GEM e6 and the GEM eL XD come equipped with a continuous 7 horsepower motor and a 15 horsepower peak during acceleration and hill climbing. A 7 horsepower performance package can also be added to the other GEM models for more demanding applications.

“**We use our GEM cars for multiple purposes - as security vehicles to patrol around the stadium and as light-duty pick-up trucks. We haven’t found anything they can’t do for us. They get quite a workout every day and take it very well.**”

-M. Blush, Washington Nationals Park

expand your capabilities
2009 GEM Passenger Vehicles

**GEM e2**
- Curb Weight: 1,140 lbs
- GVW: 1,850 lbs
- Payload Capacity*: 710 lbs
- Length: 99"
- Height: 70"
- Width: 55"
- Wheelbase: 72"
- Cubic Feet of Cab: 47 ft
- Turning Radius: 12 ft
- Tires (Street-rated): 12-inch
- Range: Up to 35 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Six 12-volt flooded electrolyte batteries
- 72-volt battery system with onboard charger
- Sunroof

**GEM e4**
- Curb Weight: 1,290 lbs
- GVW: 2,200 lbs
- Payload Capacity*: 910 lbs
- Length: 128"
- Height: 70"
- Width: 55"
- Wheelbase: 102"
- Cubic Feet of Cab: 78 ft
- Turning Radius: 16 ft
- Range: Up to 30 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Six 12-volt flooded electrolyte batteries
- 72-volt battery system with onboard charger
- Sunroof

**GEM e6**
- Curb Weight: 1,620 lbs
- GVW: 3,000 lbs
- Payload Capacity*: 1,380 lbs
- Length: 162"
- Height: 71"
- Width: 55"
- Wheelbase: 133"
- Cubic Feet of Cab: 109 ft
- Turning Radius: 19.5 ft
- Tires (Street-rated): 13-inch
- Range: Up to 30 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Six 12-volt maintenance-free gel batteries
- 72-volt battery system with onboard charger
- Sunroof
- 7.0 hp performance package
- Grab handles
- Mud flaps
- Right hand mirror
- Scuff guards

**GEM eL**
- Curb Weight: 1,170 lbs
- GVW: 1,850 lbs
- Payload Capacity*: 680 lbs
- Length: 108"
- Height: 70"
- Width: 55"
- Wheelbase: 72"
- Cubic Feet of Cab: 47 ft
- Turning Radius: 12 ft
- Tires (Street-rated): 12-inch
- Range: Up to 30 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Six 12-volt flooded electrolyte batteries
- 70" x 48" flat bed with a 330 lb cargo capacity
- 72-volt battery system with onboard charger

**2009 GEM Utility Vehicles**

**GEM eS**
- Curb Weight: 1,170 lbs
- GVW: 1,850 lbs
- Payload Capacity*: 680 lbs
- Length: 108"
- Height: 70"
- Width: 55"
- Wheelbase: 72"
- Cubic Feet of Cab: 47 ft
- Turning Radius: 12 ft
- Tires (Street-rated): 12-inch
- Range: Up to 30 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Six 12-volt flooded electrolyte batteries
- 72-volt battery system with onboard charger
- 70" x 48" flat bed with a 700 lb cargo capacity
- 72-volt battery system with onboard charger

**GEM eL**
- Curb Weight: 1,550 lbs
- GVW: 3,000 lbs
- Payload Capacity*: 1,450 lbs
- Length: 144"
- Height: 71"
- Width: 55"
- Wheelbase: 114"
- Cubic Feet of Cab: 47 ft
- Turning Radius: 17.5 ft
- Tires (Street-rated): 12-inch
- Range: Up to 40 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Six 12-volt flooded electrolyte batteries
- 70" x 48" flat bed with a 1,100 lb cargo capacity
- 72-volt battery system with onboard charger
- 7.0 hp performance package

**GEM eL XD**
- Curb Weight: 1,255 lbs
- GVW: 2,300 lbs
- Payload Capacity*: 1,045 lbs
- Length: 144"
- Height: 70"
- Width: 55"
- Wheelbase: 114"
- Cubic Feet of Cab: 47 ft
- Turning Radius: 17.5 ft
- Tires (Street-rated): 12-inch
- Range: Up to 30 miles
- Top Speed (High Mode): 25 mph
- Top Speed (Low Mode): 15 mph

**Standard Features**
- Nine 8-volt maintenance-free gel batteries
- 70" x 48" flat bed with a 1,100 lb cargo capacity
- 72-volt battery system with onboard charger
- 7.0 hp performance package

*Options + Passengers + Cargo
2009 GEM Specifications

Safety
• Automotive, three point safety belts.
• 12-inch or 13-inch* street-rated tires.
• Quartz-halogen headlamps with a 20-second safety delay after vehicle is turned off, front and rear turn signals, high-mount rear brake and taillights.
• Laminated, tinted automotive safety windshield glass with windshield wiper.
• Structural composite and thermoplastic body panels.
• Dual upper hand grips (optional) and lower seat rails.
• Rear and side reflectors.
• Rearview and dual exterior mirrors (driver’s side standard, passenger side optional).

Design
• The GEM e2, GEM e5, GEM el, and GEM el XD seat two occupants with bench-style seating using molded-foam cushions covered by marine grade UV-stable vinyl coverings. The GEM e4 seats four occupants with front bucket seats and a rear bench seat. The GEM e6 seats six occupants with front and middle-row bucket seats and a rear bench seat.
• Parking brake, front-wheel disc brakes, and rear-wheel hydraulic drum brakes.
• Dual A-arm front independent suspension with coil over shock.
• Automotive rack-and-pinion steering.
• Welded aluminum space-frame using custom aluminum-alloy extrusions.

Technology
• Heavy-duty DC motor with continuous 5 (or 7*) horsepower rating and 12 (or 15*) horsepower peak during acceleration and hill climbing.
• Front-wheel drive with speed reducer and integral differential.
• Solid-state custom motor controller with under and over voltage detector, regenerative braking, motor thermal protection and top speed regulation.
• Six 12-volt flooded electrolyte batteries are standard on the GEM e2, GEM e4, GEM e5, and the GEM el. Six 12-volt maintenance-free gel batteries are standard on the GEM el XD. Nine 8-volt maintenance-free gel batteries are standard on the GEM eL XD.
• On-board 72-volt DC charger that plugs into a 110-volt AC 15-amp outlet.

New for 2009

The 2009 model year introduces four new option packages that combine brand new and popular GEM options to enhance your driving experience.

From driving between buildings at work to cruising around the neighborhood, these new option packages are sure to turn heads and make your commute more enjoyable.

► Convenience Package
  Accessory Outlet
  Grab Handles
  Mud Flaps
  Right Hand Mirror
  Scuff Guards

► Deluxe Exterior Package
  Chrome Hood Decals
  Chrome License Plate Lamp
  High-Low Beam Headlamps with Chrome Light Bezels

► Deluxe Interior Package
  Deluxe Steering Wheel
  Embroidered Floor Mats
  Two-Toned Seats

► LX Package
  All Options in Convenience Package
  All Options in Deluxe Exterior Package
  All Options in Deluxe Interior Package
  Day/Night Mirror
  Dome Light
  Tilt Steering Wheel
Options and Accessories

**INTERIOR**
- Accessory Outlet: e2 e4 e6 e5 eL eL XD
- Audio System: e2 e4 e6 e5 eL eL XD
- Dash-Mounted Fan*: e2 e4 e6 e5 eL eL XD
- Dome Light: e2 e4 e6 e5 eL eL XD
- Grab Handles: e2 e4 e6 e5 eL eL XD
- Heated Seats: e2 e4 e6 e5 eL eL XD
- PA System: e2 e4 e6 e5 eL eL XD
- PA System: e2 e4 e6 e5 eL eL XD
- Scorecard Holder: e2 e4 e6 e5 eL eL XD
- Scuff Guards: e2 e4 e6 e5 eL eL XD
- Steering Wheel Lock: e2 e4 e6 e5 eL eL XD
- Valet Bar: e2 e4 e6 e5 eL eL XD

**EXTERIOR**
- Beacon Light: e2 e4 e6 e5 eL eL XD
- Chrome Bumper: e2 e4 e6 e5 eL eL XD
- Deluxe Exterior Package: e2 e4 e6 e5 eL eL XD
- Day/Night Mirror: e2 e4 e6 e5 eL eL XD
- Deluxe Interior Package: e2 e4 e6 e5 eL eL XD
- Dome Light: e2 e4 e6 e5 eL eL XD
- Grab Handles: e2 e4 e6 e5 eL eL XD
- Heated Seats: e2 e4 e6 e5 eL eL XD
- PA System: e2 e4 e6 e5 eL eL XD
- PA System: e2 e4 e6 e5 eL eL XD
- Security Light Bar**: e2 e4 e6 e5 eL eL XD
- Security Light Bar**: e2 e4 e6 e5 eL eL XD
- LED Light Bar*: e2 e4 e6 e5 eL eL XD
- Mud Flaps: e2 e4 e6 e5 eL eL XD
- Rear Window Insert: e2 e4 e6 e5 eL eL XD
- Right Hand Mirror: e2 e4 e6 e5 eL eL XD
- Rugged Bumper: e2 e4 e6 e5 eL eL XD
- Security Graphics Kit: e2 e4 e6 e5 eL eL XD
- Security Graphics Kit: e2 e4 e6 e5 eL eL XD
- Windshield Washer Kit: e2 e4 e6 e5 eL eL XD

**BATTERIES**
- Nine 8-Volt Gel Batteries: std
- Six 12-Volt Gel Batteries: std

*Available in amber, blue, or red.
**Available in amber, blue, or red.

For pictures, pricing, or more information on the available options and accessories for the 2009 GEM line of vehicles, visit gemcar.com.

Price Your Own GEM car online, including options and accessories, at gemcar.com and e-mail it to your local authorized GEM dealership for an official quote.
To add cargo-carrying capabilities to the GEM e6, consider the “S” Package, which features a 39” x 48” flat bed and nine 8-volt batteries.
Global Electric Motorcars

**ingenuity** Global Electric Motorcars is the market leader in the neighborhood electric vehicle industry and has been designing innovative battery-electric vehicles since 1998. Focusing on safety, reliability, and affordability, Global Electric Motorcars engineers and manufactures the entire line of GEM cars in Fargo, North Dakota. Our goal is to design cutting-edge transportation products that are not only eco-friendly, but also fun to drive.

**award-winning** Global Electric Motorcars won the prestigious 2007 Blue Sky Merit Award from WestStart-CALSTART “presented to companies, organizations, or individuals selected for making outstanding contributions to clean air, energy-efficiency, and to the advanced transportation industry.” In 2008, Global Electric Motorcars was also honored with the North Dakota Business Development Award. This award recognized our work in creating jobs, and bringing national and international attention to the state of North Dakota.

**environmentally-friendly** Over 38,000 GEM cars are on the road nationwide and internationally. These cars have been driven over 250 million miles and as a result, have saved over 12.5 million gallons of gasoline and kept over 150 tons of ozone-depleting pollutants from reaching the air.

▶ 1998 when Global Electric Motorcars began manufacturing GEM cars
Nationwide Dealer Network

visit your GEM dealership  Take a test drive, get a quote, or learn more about the many benefits of driving a GEM car. Visit our web site at gemcar.com to locate your nearest GEM dealership.

visit www.gemcar.com  Learn more about each of the six GEM models including pricing, the many options and accessories available, and information on service programs. Use our cost calculator to determine your cost savings for purchasing a battery-electric vehicle and find out how others are using GEM cars at their job sites and in their communities.

accessible  There are over 150 GEM dealerships across the country and around the world available to help you identify the best GEM battery-electric vehicle to suit your needs. GEM cars can be custom ordered or purchased directly from GEM dealerships in your area.

Ask your GEM dealer about federal, state, and local financial incentives available for vehicles that are “alternative-fueled,” “plug-in electric drive,” or “zero-emissions.” Your GEM car purchase may qualify!