



## PERFORMANCE STATISTICS

### ACCELERATION AT 90% SOC \*

Zero to 30 mph: 8.5 sec  
 Zero to 40 mph: 12.6 sec  
 Zero to 50 mph: 18.4 sec  
 Zero to 60 mph: **27.0 sec**  
 Performance Goal: 13.5 seconds; 0 to 60 mph

### ACCELERATION AT 50% SOC \*

Zero to 30 mph: 9.4 sec  
 Zero to 40 mph: 14.2 sec  
 Zero to 50 mph: 21.5 sec  
 Zero to 60 mph: **34.1 sec**  
 Performance Goal: 13.5 seconds; 0 to 60 mph

### MAXIMUM SPEED

At 50% SOC: 70 mph  
 Performance Goal: 70 mph

### CONSTANT SPEED RANGE

45 mph Distance: 49.5 miles  
 45 mph Energy Used: 7.2 kWhr  
 45 mph Efficiency: 0.171 kWhr/mile  
 45 mph Specific Energy: 0.0104 kWhr/lb  
 60 mph Distance: 26.6 miles  
 60 mph Energy Used: 5.3 kWhr  
 60 mph Efficiency: 0.199 kWhr/mile  
 60 mph Specific Energy: 0.0077 kWhr/lb

### DRIVING CYCLE RANGE

77°F Distance: **45.4 miles**  
 77°F Energy Used: 7.77 kWhr  
 77°F Efficiency: 0.145 kWhr/mile  
 77°F Specific Energy: 0.0113 kWhr/lb  
 19°F Distance: **43.5 miles**  
 19°F Energy Used: 7.75 kWhr  
 19°F Efficiency: 0.178 kWhr/mile  
 19°F Specific Energy: 0.0112 kWhr/lb

Performance Goal: 60 miles

### GRADEABILITY\*

Maximum Grade: **15.2%**  
 Performance Goal: 25%  
 Speed At 3% Grade: 60 mph  
 Performance Goal: 55 mph  
 Speed At 6% Grade: 47 mph  
 Performance Goal: 45 mph

### HANDLING COURSE

Avg Time @ 90% SOC: 58.6 sec  
 Avg Time @ 50% SOC: 58.3 sec  
 Avg Time @ 20% SOC: 58.1 sec  
 Avg Dodge Neon (ICE) Time: 54.62 sec  
 Average Chevrolet S-10 Time: 58.29 sec

### BRAKING STABILITY

Controlability: No Stability Problems  
 Distance Dry/Wet: 164.4/214.4 feet

### CHARGER

Ground Current During Charge: <0.01 mA  
 Battery Leakage Current: <0.01 mA  
 Charger Efficiency: 95.2%  
 Average Power Factor: **0.937**  
 Performance Goal: 0.95  
 Average THD: **29.0%**  
 Performance Goal: 5%  
 Time From 80% DOD: 3 hours 54 minutes  
 Performance Goal: <8 hours

### VEHICLE TYPE

Conversion Of: Geo Metro  
 VIN: 2CIMR5299567000106  
 Seating Capacity: 4 Adults

Features: AM/FM Radio, Heater,  
 Battery Thermal Management,  
 Power Steering, Power Brakes,  
 Front Wheel Drive, Front Disc  
 Brakes & Anti-Lock Brakes

### DIMENSIONS

Wheelbase: 93.0 inches  
 Track F/R: 55.0/53.9 inches  
 Length: 164.3 inches  
 Width: 62.0 inches  
 Height: 54.5 inches  
 Ground Clearance: >50 mm  
 Cargo Space: No Intrusion  
 on OEM Space

### WEIGHT

Curb Weight: 2290 lbs  
 Test Weight: 2424 lbs  
 Distribution F/R: 49/51 %  
 Conversion GVWR: 2800 lbs  
 OEM GVWR: 2800 lbs  
 Payload: **376 lbs**

### WHEELS & TIRES

Wheel Size: 13 inches  
 Tire Mfg: Goodyear Invicta  
 Tire Size: P165/70R13  
 Tire Pressure F/R: 44/44 psi  
 Spare Installed: No

### DRIVE SYSTEM

Drive Type: 35 kW AC Induction  
 Motor Mfg: Solectria  
 Controller Mfg: Solectria  
 Transmission: Single Speed

### BATTERY

Manufacturer: Hawker Energy  
 Type: G12V26Ah10C Sealed Lead Acid  
 Number of Modules: 30  
 Total Traction Voltage: 180 volts  
 Battery Pack Weight: 690 lbs  
 Locations In Vehicle: Under Trunk  
 & Engine Compartment

### CHARGER

Location: Trunk  
 Input Voltage(s): 120/208/240 volts AC  
 Input Current(s): 15/14.4/12.5 amperes AC

### INTERLOCKS

Key Removable When Off Only: Yes  
 Key Off In Park Only: Yes  
 Start In Park Only: Yes  
 Start Blocked By Accelerator: **No**  
 Start Blocked On Charge: Yes

### REQUIREMENTS

Manual Disconnect Present & Operational: **No**  
 Batteries Sealed or Valve Regulated: Yes  
 Charger Automatic Control: Yes  
 SOC Indicator: Yes  
 Battery Voltage Indicator: **No**  
 Battery Current Indicator: **No**  
 Regenerative Current Indicator: **No**  
 Transmission Single Speed: Yes  
 Transmission Parking Pawl: Yes  
 No Open Access to High Voltage: Yes  
 All High Voltage Clearly Marked: Yes  
 Control Efforts Similar To OEM: Yes

Test Date: October 1994

### Notes:

**Bold** - Results did not meet EV America  
 Performance Goal

\* - Tested at gross vehicle weight

### TEST EXCEPTIONS

*Prototype vehicle*  
*Payload 324 lbs less than required*  
*Required charger adjustment*  
*Required battery module replacement*

# EV AMERICA