

VEHICLE TYPE

Conversion Of: Chevrolet S10 VIN: 1GCCS1443R8203148 Seating Capacity: 2 Adults Features: A/C, Power Steering

AM/FM Stereo, Power Brakes, Battery Thermal Management, Anti-Lock Brakes & Heater

DIMENSIONS

Wheelbase: 117.4 inches Track F/R: 54.7/55.0 inches Length: 200.0 inches Width: 68.2 inches Height: 61.4 inches Ground Clearance: >50 mm Cargo Space: No Intrusion on OEM Space

WEIGHT

Curb Weight: 4730 lbs Test Weight: 4862 lbs Distribution F/R: 49/51 % Conversion GVWR: 5400 lbs OEM GVWR: 4600 lbs Payload: **538 lbs**

WHEELS & TIRES

Wheel Size: 15 inch Tire Mfg: Uniroyal Tire Size: P205/75R15 Tire Pressure F/R: 35/35 psi Spare Installed: No

DRIVE SYSTEM

Drive Type: 50 kW Induction Motor Mfg: Hughes Controller Mfg: Hughes Transmission: Single Speed

BATTERY

Manufacturer: Hawker Energy

Type: G12V38Ah10C Sealed Lead Acid

Number of Modules: 52

Total Traction Voltage: 312 volts Battery Pack Weight: 1820 lbs Locations In Vehicle: Under Cab

& Cargo Bed

CHARGER

Location: Under Hood

Input Voltage(s): 110/220 volts AC Input Current(s): 50/30 amperes AC

INTERLOCKS

Key Removable When Off Only: Yes

Key Off In Park Only: Yes Start In Park Only: **No**

Start Blocked By Accelerator: Yes Start Blocked On Charge: Yes

REQUIREMENTS

Manual Disconnect Present & Operational: Yes 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: No
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

Payload 112 lbs less than required
Requires offboard transformer for charging
Testing delayed by charge times > 8 hours
Charge Complete Indicator lights prematurely
Charger/Controller GFI trips inadvertently
OEM GVWR re-certified by converter
Driveline contact during hard cornering & rough road

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PERFORMANCE STATISTICS

ACCELERATION AT 90% SOC *

Zero to 30 mph: 7.9 sec Zero to 40 mph: 12.2 sec Zero to 50 mph: **18.7 sec**

Performance Goal: 13.5 seconds; 0 to 50 mph

ACCELERATION AT 50% SOC

Zero to 30 mph: 8.2 sec Zero to 40 mph: 12.8 sec Zero to 50 mph: **20.1 sec**

Performance Goal: 13.5 seconds; 0 to 50 mph

MAXIMUM SPEED

At 50% SOC: 71 mph Performance Goal: 70 mph

CONSTANT SPEED RANGE

45 mph Distance: 70.7 miles
45 mph Energy Used: 20.9 kWhr
45 mph Efficiency: 0.296 kWhr/mile
45 mph Specific Energy: 0.0115 kWhr/lb
60 mph Distance: 47.3 miles
60 mph Energy Used: 19.1 kWhr
60 mph Efficiency: 0.404 kWhr/mile
60 mph Specific Energy: 0.0105 kWhr/lb

DRIVING CYCLE RANGE

77°F Distance: 68.8 miles
77°F Energy Used: 20.90 kWhr
77°F Efficiency: 0.304 kWhr/mile
77°F Specific Energy: 0.0115 kWhr/lb
19°F Distance: **55.24 miles**19°F Energy Used: 18.90 kWhr
19°F Efficiency: 0.342 kWhr/mile
19°F Specific Energy: 0.0104 kWhr/lb
Performance Goal: 60 miles

GRADEABILITY*

Maximum Grade: 19% Performance Goal: 25% Speed At 3% Grade: 59 mph Performance Goal: 55 mph Speed At 6% Grade: 45 mph Performance Goal: 45 mph

HANDLING COURSE

Avg Time @ 90% SOC: 59.8 sec Avg Time @ 50% SOC: 59.8 sec Avg Time @ 20% SOC: 60.8 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: 163.6/214.2 feet

CHARGER

Ground Current During Charge: <0.01 mA Battery Leakage Current: 1.2 mA Charger Efficiency: 95.2% Average Power Factor: **0.893** Performance Goal: 0.95 Average THD: **19.5%** Performance Goal: 5%

Time From 80% DOD: 15 hours 40 minutes

Performance Goal: <8 hours