



DODGE CARAVAN

PERFORMANCE STATISTICS

ACCELERATION AT 90% SOC *

Zero to 30 mph: 11.1 sec
 Zero to 40 mph: 19.9 sec
 Zero to 50 mph: 30.7 sec
 Zero to 60 mph: **70.0 sec**
 Performance Goal: 13.5 seconds; 0 to 60 mph

ACCELERATION AT 50% SOC *

Zero to 30 mph: 12.9 sec
 Zero to 40 mph: 20.8 sec
 Zero to 50 mph: 33.9 sec
 Zero to 60 mph: **80.0 sec**
 Performance Goal: 13.5 seconds; 0 to 60 mph

MAXIMUM SPEED

At 50% SOC: **62 mph**
 Performance Goal: 70 mph

CONSTANT SPEED RANGE

45 mph Distance: 86.4 miles
 45 mph Energy Used: 27.4 kWhr
 45 mph Efficiency: 0.317 kWhr/mile
 45 mph Specific Energy: 0.0163 kWhr/lb
 60 mph Distance: 57.0 miles
 60 mph Energy Used: 23.78 kWhr
 60 mph Efficiency: 0.417 kWhr/mile
 60 mph Specific Energy: 0.0141 kWhr/lb

DRIVING CYCLE RANGE

77°F Distance: **51.40 miles**
 77°F Energy Used: 21.88 kWhr
 77°F Efficiency: 0.426 kWhr/mile
 77°F Specific Energy: 0.0130 kWhr/lb
 19°F Distance: **48.60 miles**
 19°F Energy Used: 21.89 kWhr
 19°F Efficiency: 0.450 kWhr/mile
 19°F Specific Energy: 0.0130 kWhr/lb
 Performance Goal: 60 miles

GRADEABILITY*

Maximum Grade: **16%**
 Performance Goal: 25%
 Speed At 3% Grade: **48 mph**
 Performance Goal: 55 mph
 Speed At 6% Grade: **37 mph**
 Performance Goal: 45 mph

HANDLING COURSE

Avg Time @ 90% SOC: 66.0 sec
 Avg Time @ 50% SOC: 63.9 sec
 Avg Time @ 20% SOC: 118 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: 207.2/355.1 feet

CHARGER

Ground Current During Charge: Not Measured
 Battery Leakage Current: 1.7 mA
 Charger Efficiency: 98.8%
 Average Power Factor: **0.93**
 Performance Goal: 0.95
 Average THD: **45.0%**
 Performance Goal: 5%
 Time From 80% DOD: 5 hours 7 minutes
 Performance Goal: <8 hours

VEHICLE TYPE

Conversion Of: Dodge Caravan
 VIN: 2B4GH25945R100022
 Seating Capacity: 5 Adults

Features: A/C, AM/FM Radio, Heater,
 Power Steering, Power Brakes,
 Front Wheel Drive & Front
 Disc Brakes

DIMENSIONS

Wheelbase: 112.4 inches
 Track F/R: 60.5/62.3 inches
 Length: 177.7 inches
 Width: 72.7 inches
 Height: 68.0 inches
 Ground Clearance: >50 mm
 Cargo Space: No Intrusion on
 OEM Space

WEIGHT

Curb Weight: 5150 lbs
 Test Weight: 5138 lbs
 Distribution F/R: 50/50 %
 Conversion GVWR: 5950 lbs
 OEM GVWR: 5950 lbs
 Payload: 812 lbs

WHEELS & TIRES

Wheel Size: 15 inches
 Tire Mfg: Goodyear Momentum
 Tire Size: P205/75R15
 Tire Pressure F/R: 50/50 psi
 Spare Installed: Yes

DRIVE SYSTEM

Drive Type: 54 kW Brush DC
 Motor Mfg: General Electric
 Controller Mfg: General Electric
 Transmission: **2 Speed Manual**

BATTERY

Manufacturer: Eagle-Picher
 Type: NIF - 200 - 5 Nickel Iron
 Number of Modules: 30
 Total Traction Voltage: 180 volts
 Battery Pack Weight: 1685 lbs
 Locations In Vehicle: Beneath Vehicle

CHARGER

Location: Under Hood
 Input Voltage(s): **208/240 volts AC**
 Input Current(s): 40 amperes AC

INTERLOCKS

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

REQUIREMENTS

Manual Disconnect Present & Operational: **No**
 Batteries Sealed or Valve Regulated: **No**
 Charger Automatic Control: Yes
 SOC Indicator: Yes
 Battery Voltage Indicator: **No**
 Battery Current Indicator: **No**
 Regenerative Current Indicator: **No**
 Transmission Single Speed: **No**
 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

- No 110 volt charging*
- Charger replaced*
- Motor and controller replaced*
- Batteries require watering*
- Controller tuning required to meet maximum speed*
- Charger battery temperature inhibit bypassed*
- Electrolyte reservoir leak during charge*

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