VEHICLE TYPE
Conversion Of: Ford Ranger
VIN: 1FTCR10AXRPB48159
Seating Capacity: 2 Adults

DIMENSIONS
Wheelbase: 114.1 inches
Track F/R: 57.4/57.5 inches
Length: 197.8 inches
Width: 70.0 inches
Height: 63.0 inches
Ground Clearance: >50 mm
Cargo Space: No Intrusion on OEM Space

WEIGHT
Curb Weight: 4000 lbs
Test Weight: 4589 lbs
Distribution F/R: 50/50 %
Conversion GVWR: 4700 lbs
OEM GVWR: 4700 lbs
Payload: 111 lbs

WHEELS & TIRES
Wheel Size: 14 inch
Tire Mfg: Firestone
Tire Size: P225/70R14
Tire Pressure F/R: 35/35 psi
Spare Installed: No

DRIVE SYSTEM
Drive Type: 32 kW
Brushless DC Motor
Motor Mfg: UQM
Controller Mfg: UQM
Transmission: 5 Speed Manual

BATTERY
Manufacturer: Optima
Type: Prototype Deep Cycle
Number of Modules: 30
Total Traction Voltage: 180 volts
Battery Pack Weight: 1170 lbs
Locations In Vehicle: Under Cargo Bed & Under Cab

CHARGER
Location: Under Cargo Bed
Input Voltage(s): 240 volts AC
Input Current(s): 25 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: Yes
Batteries Sealed or Valve Regulated: Yes
SOC Indicator: Yes
Battery Voltage Indicator: Yes
Battery Current Indicator: Yes
Regenerative Current Indicator: Yes
Transmission Single Speed: No
Transmission Parking Pawl: No
No Open Access to High Voltage: Yes
All High Voltage Clearly Marked: No
Control Efforts Similar To OEM: Yes

NOW: Bold - Results did not meet EV America Performance Goal
* - Tested at gross vehicle weight

BATTERY PERFORMANCE

ACCELERATION AT 90% SOC *
Zero to 30 mph: 10.9 sec
Zero to 40 mph: 18.4 sec
Zero to 50 mph: 30.3 sec
Performance Goal: 13.5 seconds, 0 to 50 mph

ACCELERATION AT 50% SOC *
Zero to 30 mph: 10.8 sec
Zero to 40 mph: 18.3 sec
Zero to 50 mph: 30.3 sec
Performance Goal: 13.5 seconds, 0 to 50 mph

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

CONSTANT SPEED RANGE
45 mph Distance: 53.5 miles
45 mph Energy Used: 17.74 kWhr
45 mph Efficiency: 0.332 kWhr/mile
45 mph Specific Energy: 0.0152 kWhr/lb
60 mph Distance: 38.3 miles
60 mph Energy Used: 11.47 kWhr
60 mph Efficiency: 0.299 kWhr/mile
60 mph Specific Energy: 0.0098 kWhr/lb

DRIVING CYCLE RANGE
77°F Distance: 43.30 miles
77°F Energy Used: 18.51 kWhr
77°F Efficiency: 0.427 kWhr/mile
77°F Specific Energy: 0.0158 kWhr/lb
19°F Distance: 29.80 miles
19°F Energy Used: 12.09 kWhr
19°F Efficiency: 0.406 kWhr/mile
19°F Specific Energy: 0.0103 kWhr/lb
Performance Goal: 60 miles

GRADEABILITY*
Maximum Grade: 30%
Performance Goal: 25%
Speed At 3% Grade: 51 mph
Performance Goal: 55 mph
Speed At 6% Grade: 36 mph
Performance Goal: 45 mph

HANDLING COURSE
Avg Time @ 90% SOC: 62.1 sec
Avg Time @ 50% SOC: 61.6 sec
Avg Time @ 20% SOC: 62.0 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: 157.8/190.0 feet

CHARGER
Ground Current During Charge: <0.01 mA
Battery Leakage Current: 0.42 mA
Charger Efficiency: 96.8%
Average Power Factor: 0.53
Performance Goal: 0.95
Average THD: 33.1%
Performance Goal: 5%
Time From 80% DOD: 10 hours 50 minutes
Performance Goal: <8 hours

TEST EXCEPTIONS
Prototype vehicle
Payload 539 lbs less than required
Traction battery fuse replaced after battery short
Charger not operable from GFCI protected circuit
Testing delayed by charge times > 8 hours
Removed from testing to check for failed battery

PERFORMANCE STATISTICS
TEST DATE: October 1994