



UNIQUE MOBILITY PICKUP

PERFORMANCE STATISTICS

ACCELERATION AT 90% SOC *

Zero to 30 mph: 10.9 sec
 Zero to 40 mph: 18.4 sec
 Zero to 50 mph: **30.9 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

VEHICLE TYPE

Conversion Of: Ford Ranger
 VIN: 1FTCR10AXRPB48159
 Seating Capacity: 2 Adults
 Features: A/C, AM/FM Stereo,
 Power Brakes, Power
 Steering, Front Disc Brakes
 & Anti-Lock Brakes

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
 Charger Automatic Control: 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

Test Date: October 1994

Notes:

Bold - Results did not meet EV America
 Performance Goal

* - Tested at gross vehicle weight

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

EV AMERICA