





Lead Acid (PbA)



Overview of the Ranger Electric (Lead Acid Batteries)

The 1999 Ford Ranger EV pickup truck is based on the best-selling compact truck, the Ford Ranger, and incorporates the same "Best-in-Class" design features as its 1999 gasoline counterpart. The Ranger EV is powered by proven lead acid batteries and is equipped with third-generation, electric vehicle-specific, powertrain components and electronics.

The Ranger EV is Ford's 1999 production electric vehicle and has been designed and tested to be reliable, durable and "Built Ford Tough." The Ranger EV is warranted by Ford and provides a "Best-in-Class" electric-powered pickup truck. Select Ford dealerships will provide sales, service, and complete customer satisfaction for the advanced technology Ranger EV.

The Ford Ranger EV has been built with fleet customer needs in mind, including such features as:

- Cargo carrying capacity
- Usable payload/Full bed
- 4-wheel ABS
- Climate control with standard A/C
- Dual air bags

• . . Tilt column

Additionally, the Ranger EV includes components unique to EV's such as:

- Regenerative Braking
- Electrohydraulic power steering
- On-board charger
- Battery heater
- Re-programmable electronics
- Conductive Charging

Vehicle Model Year Bodystyle Wheelbase Payload (base vehicle) Gross vehicle weight Dimensions

Ground clearance Powertrain Motor

Transaxle (integrated with motor) Torque Standard Features **Dual Air Bags**

Electronic Microprocessor Control Units -Battery Controller -Motor Inverter

-Communication Center

Heater Regenerate Braking Economy Drive

DC/DC Converter 4-wheel disc ABS

Power Steering Wheels and Tires 1999 Styleside, regular cab pickup Short wheelbase 650 lbs. 5400 lbs. Same as 1999 gasoline powered engine Ranger 7.4"

90hp, 67kW(peak), high efficiency, liquid cooled, 3-phase AC induction Single-speed, rear-wheel drive using half-shafts 140 ft. - lbs.

Occupant safety protection

Ford designed, state-of-the-art Monitors functions of battery Converts high-voltage DC to 3-phase AC Operates instrumentation and climate control

Electric resistance Energy recovery to increase range Driver controlled with increased regenerative braking to maximize

vehicle range Electronic "alternator"

Straighter stopping control under most conditions

Electrohydraulic Styled lightweight aluminum wheels, 15" low rolling resistance tires

Battery

Charger

Performance

Type Sealed lead acid Modules 39/8-volt Voltage 312 volt system 23 kWh (19 kWh at 85% discharge) Battery energy capacity

On-board, 240volts/30amp

12.5 seconds

73 miles

82 miles

(gasoline Ranger <12sec.)

Top speed (governed) 75 mph

Range -MH

rating @ FUDS

0-50 mph acceleration

-FUDS cycle @ 72F without A/C or heater operation

-Customer range @ 72F 50 miles -Customer range @ 32F 35 miles including heater

Warranty

Batteries Options

Vehicle

Spare Tire and Jack

Same as 1999 gasoline powered Ranger (3years/36,000 miles)

2-year; 1 year full, second year pro-rated

Mounted in pickup bed



