APPENDIX 12 – Ford Ranger Service Bulletins

Ann O'Neill
Director
Vehicle Service and Programs
Ford Customer Service Division

Ford Motor Company
P.O. Box 1904
Dearborn, Michigan 48121-1904

1998 Ranger
Vehicle ID #: 1FTZR1070WTA84859 00B37

March, 2000

ELECTRIC TRANS, ENGINEERING
401 SOUTH 2ND AVE
PHOENIX, AZ 85003

Ford Motor Company is providing a no-charge Service Program, Number 00B37, to owners of certain 1998 through 2000 model year Ranger EV vehicles with lead-acid traction battery.

Reason For This Program:

The current traction battery in some cases may prematurely trigger the "limited operating strategy" (LOS), eventually leading to reduced battery module energy and possible loss of power.

New charging system software has been developed which corrects this condition and provides maximum driving range.

What Ford Will Do:

Ford representatives will be contacting you to schedule an appointment to install new battery charging software and test drive your vehicle(s), at your designated location(s).

Depending on the results of the test drive and diagnostics, Ford may determine that one or more of your battery modules or other vehicle components may require replacement. In that instance, you will be asked to contact your nearest EV dealer to schedule an appointment for repair, as Ford representatives will not be equipped to perform major repairs.

How Long Will It Take?

Normally, the time needed for this repair will take one day. However, in some cases multiple test drives may be required, which may add an additional day. If feasible, Ford is requesting that fleets with multiple units have the vehicles centrally located to expedite the evaluation and repair process.

What You Should Do:

If you are not contacted by March 24, 2000 in regard to this program, please call Ms. Kellie Micou at (313) 248-6581 between 8:00 AM to 5:00 PM (EST) to schedule a visit by Ford personnel.

Rental Cars:

While Ford personnel are on-site, Ford Motor Company will pay for a loaner or rental vehicle, for a maximum of five days.

Changed Address Or Sold The Vehicle?

Please fill out the enclosed prepaid postcard and mail it to us if you have changed your address or sold the vehicle.

We are taking this action as part of our ongoing efforts to maintain owner confidence in our products. We hope this program will confirm your continued satisfaction in your Ford-built vehicle.

Sincerely,

Ann O'Neill
Director
Vehicle Service and Programs

O.N.P.
00B37

A. R. O'Neill
Director
Vehicle Service and Programs
Ford Customer Service Division

Ford Motor Company
P.O. Box 1904
Dearborn, MI 48121-1904

1998 Ranger
Vehicle ID #: 1FTZR1070WTA84859 99S20

July, 1999

ELECTRIC TRANS, ENGINEERING
401 SOUTH 2ND AVE
PHOENIX, AZ 85003

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Ford Motor Company has decided that a defect which relates to motor vehicle safety exists in certain 1998 and 1999 Ranger Electric vehicles involving the transmission park mechanism.

Safety Defect: The transmission park mechanism on certain 1998 and 1999 Ranger Electric vehicles may not fully engage when the shift lever is placed in the "PARK" position. Binding can be caused by a park detent spring that was misaligned during transaxle production. If the park mechanism does not engage and the vehicle operator does not apply the parking brake as directed in the Owner's Guide, the vehicle may be free to roll as if in neutral, which could potentially result in a vehicle crash.

Repairs: A specially trained EV-technician from a group who have been specially trained to diagnose this concern, will inspect your Ranger(s) at your location and will be able to determine if the transaxle requires replacement. This on-site inspection will take less than 15 minutes, and will not require the use of a hoist. If the transaxle needs to be replaced, the technician will drive the vehicle to the nearest EV-dealer for transaxle replacement under this Recall Program.

Action You Should Take: Fully apply the parking brake before exiting the vehicle.

Ford will contact owners directly to make arrangements for a transaxle inspection by a specially trained Ford EV factory technician. If you have not heard from the EV technician within two weeks of receipt of this letter, call the EV-Hotline collect at 1-313-390-7298 (8:00AM to 8:00PM EST).

If it is determined that *transaxle replacement* is necessary, the time needed for this repair at the authorized EV-dealer is less than one day. However, due to service scheduling issues, your dealer may need your vehicle for a longer period of time.

Rental Cars: If your vehicle requires transaxle replacement, Ford Motor Company will pay for a loaner or rental vehicle, except for fuel which will be at the owner's expense.

Towing: If towing is required, Ford Motor Company will pay for all costs incurred to tow the vehicle to or from the nearest authorized EV dealer. In cases where the EV dealer is located beyond the normal driving range of the vehicle, Ford will pay for towing up to 100 miles each way.

Refunds: If you paid to have this transaxle service (for binding park detent) done before the date of this letter, Ford is offering a full refund. For the refund, please give your paid original receipt to your Ford or Lincoln Mercury dealer. To avoid delays, do not send receipts to Ford Motor Company.

Changed Address Or Sold The Vehicle? Please fill out the enclosed prepaid postcard and mail it to us if you have changed your address or sold the vehicle.

If the dealer doesn't make the repair promptly and without charge, you may contact the Ford Customer Assistance Center, P.O. Box 6248, Dearborn, Michigan 48121. You also may send a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590 or call the toll free Auto Safety Hotline 1-800-424-9393 (Washington, D.C. area residents may call 366-0123).

We regret the inconvenience this service may cause you, but we want you to have the work done for your safety and satisfaction with you Ford-built vehicle.

Sincerely,

A. R. O'Neill
Director
Vehicle Service and Programs

Safety Recall
99S20

A. R. O'Neill
Director
Vehicle Service and Programs
Ford Customer Service Division

Ford Motor Company
P.O. Box 1904
Dearborn, MI 48121-1904

1998 Ranger
Vehicle ID #: 1FTZR1070WTA84859 99B17

September, 1999

ELECTRIC TRANS, ENGINEERING
401 SOUTH 2ND AVE
PHOENIX, AZ 85003

Ford Motor Company is providing a no-charge Service Program, Number 99B17, to owners of certain 1998 and 1999 model year Ranger-EV vehicles.

Reason For This Program: Due to rapidly maturing electric-vehicle technology and recent quality improvements, approximately 500 1998 and 1999 model year Ranger-EV vehicles are eligible for several product improvements and component upgrades.

No Charge Service: *Your vehicle(s) will have the following upgrades performed by the dealer:*

- Add decal to remind operator to keep the vehicle "ON PLUG"
- Replace the steering column insert plate with a revised design

The following dependability upgrades will be performed if deemed necessary by the diagnostic procedure:

1998 Ranger-EV with Lead Acid Battery	1999 Ranger-EV with Lead Acid Battery	1999 Ranger-EV with Nickel Metal Hydride Battery
• Update/Replace Battery Control Module (BCM)	• Update Battery Control Module (BCM)	• Replace Nickel Metal Hydride (NiMH) Battery Module Nuts
• Update/Replace Transaxle Inverter Module (TIM)		• Add Retention Clip To NiMH Battery Pack Fan Wiring
• Replace Interface Adapter Assembly (IAA) Module		• Install Service Card into Battery Pack
• Replace Traction Battery Charger		• Replace Traction Battery Charger
• Check Traction Battery Heaters		• Replace Battery Control Module (BCM)

Your vehicle is eligible for this program until September 30, 2000, regardless of mileage. (After this program expires, the vehicle may still be eligible for this service under any remaining vehicle warranty coverage.)

How Long Will It Take?

The time needed for this repair may be two to three days, depending on model year, battery type and state of battery charge. However, due to service scheduling issues, your dealer may need your vehicle for a longer period of time. Please call your dealer for a service date.

Call Your Dealer:

Call your dealer without delay. Ask for a service date and whether parts are in stock for Owner Notification Program 99B17.

When you bring your vehicle in, show the dealer this letter. If you misplace this letter, your dealer will still do the work, free of charge.

Refunds:

If you paid to have any of these service actions done before the date of this letter, Ford is offering a full refund. For the refund, please give your paid original receipt to your Ford or Lincoln Mercury dealer. To avoid delays, do not send receipts to Ford Motor Company.

Rental Cars:

Ford Motor Company will pay for a loaner or rental vehicle, except for fuel which will be at the owner's expense.

Changed Address Or Sold The Vehicle?

Please fill out the enclosed prepaid postcard and mail it to us if you have changed your address or sold the vehicle.

We are taking this action as part of our ongoing efforts to maintain owner confidence in our products. We hope this program will confirm your continued satisfaction in your Ford-built vehicle.

Sincerely,

A. R. O'Neill
Director
Vehicle Service and Programs

O.N.P
99B17

A. R. O'Neill
Director
Vehicle Service and Programs
Ford Customer Service Division

Ford Motor Company
P.O. Box 1904
Dearborn, Michigan 48121-1904

1998 Ranger
Vehicle ID #: 1FTZR1070WTA84859 99M05

November, 1999

ELECTRIC TRANS, ENGINEERING
401 SOUTH 2ND AVE
PHOENIX, AZ 85003

Ford Motor Company is providing additional warranty coverage for the traction batteries to owners of 1998 Ranger-EV vehicles. This owner notification does not affect leased vehicles because these already have unique 3-year/36,000 traction battery coverage.

What Is The Reason For This Program?

Some of the affected vehicles may experience premature battery wear out.

Additional Coverage:

To maximize your satisfaction with your 1998 Ranger-EV, Ford is providing full traction battery warranty coverage for two (2) years, instead of the second year being pro-rated.

Your vehicle is eligible for this program for two years from the warranty start date, regardless of mileage. (After this program expires, the vehicle may still be eligible for this service under any remaining vehicle warranty coverage.)

What We Will Do:

If your vehicle's driving range has diminished and if the reduced driving range is noticeably different than your past experience, return the vehicle to an authorized EV dealer. The dealership EV technician will work with Ford engineering to determine whether battery service is appropriate.

What Should You Do?

PLEASE KEEP THIS LETTER. If your vehicle should exhibit the condition described above within the indicated two-year time limitation, contact your dealer. Show the dealer this letter.

If you misplace this letter, your dealer will still do the work free of charge.

Refunds:

If you paid to have traction service done before the date of this letter, Ford is offering a full refund. For the refund, please provide your paid original receipt to your Ford dealer. To avoid delays, do not send receipts to Ford Motor Company.

Rental Cars:

Ford Motor will provide or pay for a loaner or rental vehicle, while this vehicle is at a Ford EV dealer for repairs, except for fuel, which will be at owner's expense.

Changed Address Or Sold The Vehicle? If you have changed your address or sold the vehicle, please fill out the enclosed prepaid postcard and mail it to us.

We are taking this action as part of our ongoing efforts to maintain owner confidence in our products. We hope this program will confirm your continued satisfaction in your Ford or Lincoln Mercury built vehicle.

Sincerely,

A. R. O'Neill
Director
Vehicle Service and Programs

O.N.P.
99M05