

ELECTRICAL—THINK NEIGHBOR MOTOR UPGRADE FOR OVERHEAT CONDITION AND SPEED SENSOR LOSS OF OPERATION

**Article No.
03-1-3**

THINK: 2002 THINK NEIGHBOR

ISSUE

Some 2002 TH!NK Neighbors may exhibit speed sensor failure, vehicle loss of power or no enable condition due to the motor exceeding the temperature limit. This may occur if the drive cycle is too aggressive such as extended hill climbs or excessive vehicle loading. If the vehicle is experiencing continuing overhear concerns by displaying the overhear temperature symbol or storing the 90 DTC, replace the motor with the following revised high temperature capacity motor.

ACTION

If the motor is overheating, replace the motor and controller with the revised parts. Refer to the following Service Information for details.

SERVICE INFORMATION

NOTE

THE MODULE ASSEMBLY ECU (CONTROLLER) MUST BE UPGRADED WHEN REVISING THE MOTOR FROM “AF” OR PRIOR LEVEL TO “AG” LEVEL AND BEYOND. THE REVISED MOTOR PART NUMBER IS 2E3Z-14B280-BA AND IT IS BLACK IN COLOR. THE UPGRADE MODULE ASSEMBLY ECU (CONTROLLER) PART NUMBER IS 2E3Z-14B298-AG.

CAUTION

“BA” AND BEYOND LEVEL MOTORS MUST BE MATCHED WITH “AG” AND BEYOND LEVEL CONTROLLERS. IF THEY ARE NOT MATCHED, MOTOR PERFORMANCE AND DURABILITY WILL BE EFFECTED.

NOTE

PAYLOAD IS NOT AFFECTED BY MOTOR UPGRADE. IF THE MOTOR TEMPERATURE

EXCEEDS 392° F (200° C), THE MOTOR WILL LIMIT CURRENT TO THE MOTOR (ARMATURE CURRENT) AND VEHICLE PERFORMANCE MAY SEEM SLUGGISH. THIS IS AN INCREASE OF TEMPERATURE PARAMETERS FROM 302° F (150° C) WITH THE AF AND PRIOR LEVEL MOTORS. MOTOR ARMATURE CURRENT IS LIMITED FROM 100 AMPS TO 150 AMPS WITH THE NEW MOTOR/CONTROLLER REVISION.

The speed sensor ring and pickup are fully replaceable with the upgraded motor. Fastener torques changes include:

- Motor cable large end connectors 89-106 Lb-in (10-12 N•m)
- Motor cable small end connectors 40-56 Lb-in (4-5 N•m)

NOTE

USE FORD ELECTRICAL GREASE (F8AZ-19G208-AA) ON ALL ELECTRICAL CONNECTIONS TO THE CONTROLLER MOTOR.

PART NUMBER	PART NAME
2E3Z-14B280-BA	Motor
2E3Z-14B298-AG	ECU (Controller)
F8AZ-19G208-AA	Electrical Grease

OTHER APPLICABLE ARTICLES: NONE

WARRANTY STATUS: INFORMATION ONLY

OASIS CODES: 203000, 204100, 206000, 499000, 601300, 603300, 607000, 607700, 608000, 608500, 609000, 609500, 610000, 610700, 611000, 611500, 612500, 613400, 613500, 614000, 614600, 615500, 698298

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by “do-it-yourselfers”. Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the Bulletin applies to your vehicle.