



TECH TIPS

Dixie Part Numbers: A-293 A-2075

Applications: 1999 – 2003 Ford Windstar Applications with 3.0 and 3.8L

Condition: The operator of the vehicle may comment that the alternator has recently been changed and the light comes on and/or the message screen shows “CHECK CHARGING SYSTEM”.

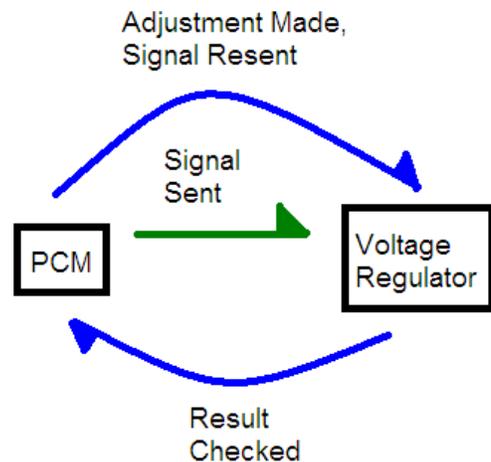


The technician may observe the diagnostic trouble codes P0171 and/or P0174 (system too lean).

Cause: On 3.8L applications the above conditions may be the result of loose connections be caused by loose fitting connections on the fuel pressure regulator vacuum line (at the intake manifold) and/or leaking isolator at the bolts or port gaskets.

On all applications the Windstar Powertrain Control Module (PCM) and regulator function a little differently than most vehicles. A typical PCM type system works as a loop. The PCM tells the regulator what voltage to operate at, the regulator sends a signal back to the PCM showing what voltage it is operating at and then the PCM sends another signal if the output voltage is still not what the initial instruction was (for adjustment or to compensate for voltage drop on the wiring).

The Windstar PCM only sends the signal once and then if the signal back is not what the PCM commanded the light and error messages come on.





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In addition to this there is a capacitor to reduce interference on the ground of the alternator. The lead that goes between the alternator frame and the body frame is prone to fail from fatigue.

Correction: Ensure that if the alternator is not a Dixie product that the correct regulator has been used, many after market regulators do not work and OE has discontinued supplying regulators.

Ensure that the capacitor lead has not deteriorated and broken.

On all models ensure that the PCM has been calibrated to the latest revision (WDS B26.2 or later). This will be noted on a decal, typically located under the hood indicating that the PCM has been updated (similar to the one below).

AUTHORIZED MODIFICATIONS MODIFICATION AUTORISÉE	
THE FOLLOWING MODIFICATIONS HAVE BEEN MADE LES MODIFICATIONS SUIVANTES ONT ÉTÉ APPORTÉES	
PCM reprogrammed	
YU7A 12A6 SUEA	
DE	
THESE MODIFICATIONS HAVE BEEN APPROVED, AS APPROPRIATE, BY EPA. CES MODIFICATIONS ONT ÉTÉ APPROUVÉES, TELLES QU'APPROPRIÉES PAR LA EPA	
DEALER NUMBER CODE DU CONCESSIONNAIRE	DATE
A1306	10/22/03
CHANGE AUTHORITY AUTORISATION	
75B	
FORD MOTOR COMPANY OF CANADA LIMITED / FORD DU CANADA LIMITEE	
SALES 477-5543	

On 1999-2001 3.8L applications inspect the vacuum line from the intake manifold to the fuel pressure regulator. If the vacuum line is loose, damaged or contaminated replace it (Ford part number XF2Z-9E498-DD).

On 1999-2000 3.8L applications inspect the left-hand valve cover it should be Ford number 3F2Z-6582-BA. Install a new gasket if required following the manufacturer's recommended procedures.

REV: 20101214 Corrected Grammar and added the reference to A-2075

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Dixie Technical Department

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