Technical Update

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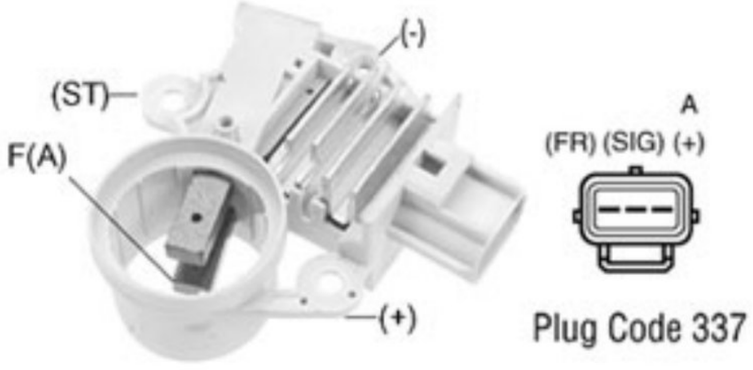
Computer Interactive Ford 6G Alternators with 35-213 Regulator, FR-SIG-A Terminals



The Ford regulator part number is XW4U-10C359-AB (WAI 35-213). This is a white package regulator (with either a white or black cover) used on the following alternators:
1L8Z-10346-AB
98AB-10300-FC
98AZ-10346-EA, FA
XF2U-10300-AB (WAI 1-2206-21FD)
XF2U-10300-BC
XF2Z-10346-AA (WAI 1-2206-21FD)
XF2Z-10346-BA
XR8U-10300-AE, CE
XR8Z-10346-AA, CE
XW4U-10300-BA, CC, CD
XW4Z-10346-AA, BA, CC

There has been some confusion as to how to bench test the Ford 6G alternators introduced on the 1999 Ford Windstar. These alternators have a regulator with FR-SIG-A terminals and it interacts with the vehicle computer. The vehicle computer determines what the voltage setting should be for any given circumstance and communicates this to the alternator voltage regulator by a digital message sent to the regulator "GEN-COM" (SIG) terminal. The voltage regulator then controls at this voltage signal until it is given another command by the computer. The voltage regulator sends a field monitor signal back to the computer from the regulator "GEN-MON" (FR) terminal.

When the vehicle starts, the alternator goes to the default voltage of 13.5V while the computer is processing variables that will determine the voltage setting that the alternator will run at. As the vehicle warms up, the computer processes information from the com-line and sends another message to run at 14.2V.

You will not be able to test bench these alternators without simulating the digital message sent from the vehicle computer to the regulator. Both JIMCO and Northwest Regulator offer test bench lead adapters that will verify the type of 6G regulator and simulate the vehicle computer for proper bench testing.

Vehicle Applications include:
(2001) Ford Escape 2.0L
(2001-00) Ford Focus 2.0L
(2000-99) Ford Windstar 3.0L
(2001-99) Ford Windstar 3.8L
(2001-00) Lincoln LS 3.0L
(2001-00) Lincoln LS 3.9L

Information courtesy of Ford, JIMCO, Northwest Regulator and WAI