

Alternator Comparison



The PennTex PX-5 Series Charging System is an extra heavy-duty upgrade for the Ford E-Series Chassis equipped with a gas or diesel engine. Our system uses external regulation for better performance and system diagnostics. It is rated at 14V, 230 and 250-amps maximum output. (Cold Rating)

The "competitor" alternator is a drop-in upgrade for the Ford E-Series chassis equipped with a gas or diesel engine. This system is internally regulated and plugs into the OEM harness. It is rated at 14V, 200-amps maximum output. (Cold Rating)



PennTex manufactures a larger positive rectifier assembly with twelve high temperature 60-amp press fit diodes. The PennTex rectifier will provide superior cooling by increased rectification and a larger heat sink area. It also features two 5/16-inch output posts to handle larger electrical loads.



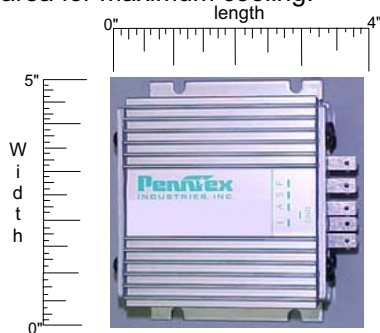
The "competitor" uses an aftermarket replacement positive rectifier assembly with only four diodes that is designed for the 130-amp Ford style alternator. It uses the standard aftermarket 1/4-inch size output post.



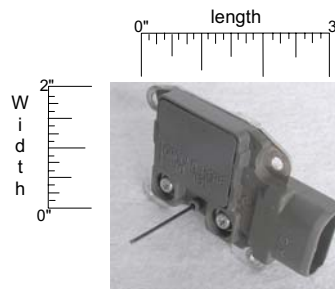
The negative heat sink design on the PennTex alternator is incorporated into the rear frame. It uses six high temperature 60-amp press fit diodes, thus utilizing the entire frame for cooling. This design has more rectification and increased heat sink surface area for maximum cooling.



The "competitor" uses an aftermarket replacement negative rectifier assembly with only four diodes that is designed for the 130-amp Ford style alternator.



PennTex designs and manufactures external regulators with premium quality components and modern assembly techniques. Our regulators are housed in a specially designed aluminum extrusion for maximum cooling.



The "competitor" uses an aftermarket replacement internal regulator assembly that is designed for the 130-amp Ford style alternator.

PennTex Industries and a "Competitor" Alternator, P.2

PennTex uses NTN brand bearings that are internationally recognized for performance and reliability. Our bearings are double wide for extra lubricant capacity and utilize high temperature polyacrylic seals and high temperature Kyodo Yushi grease for extended bearing service life, especially in high heat environments.



PennTex uses a high output, high quality rotor which is balanced using a dual plane balancer at our manufacturing plant in Texas. It features two heavy-duty coils for maximum output and durability.

A "competitor" uses an aftermarket non-premium brand bearing that is advertised to have high temperature, polyacrylic seals and Kyodo Yushi grease.



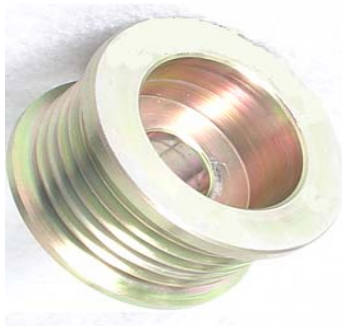
A "competitor" uses an aftermarket replacement rotor that is designed for the 130-amp Ford style alternator. It is dual plane balanced and the cooling fans are the same as the OEM design.



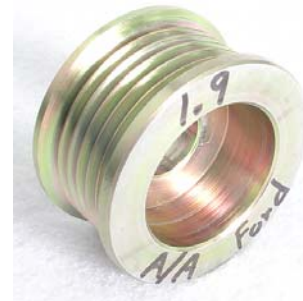
The PennTex stator, manufactured at our Texas facility, uses a large copper wire gauge. This increases current carrying capabilities and extends service life. Our wire is heavy rated by the manufacturer for high temperature and insulation thickness.



A "competitors" stator tested was a hand wound design with a smaller gauge wire. The output characteristics were similar to our PX-2 Series charging system. This component could not be fairly compared to the stator design of our larger PX-5 Series charging system.



PennTex uses a standard 2.3-inch diameter pulley which was increased from a 2.0-inch diameter pulley in 2001. Our standard size pulley reduces the chance of belt slippage, a major issue if the belt tensioner is not in the factory range. This could lead to shortened belt life and overheating of bearings, particularly in some gas engine chassis at higher RPMs.



A "competitor" uses a 1.9-inch diameter pulley with their Ford alternator replacement. The use of a smaller pulley on their alternators is standard. This will allow the alternator to turn faster at base idle to make up for any low-end deficit. Their advertising states higher amps at idle with a curve chart that shows the engine RPM @ 750. Today's engines idle @ 600-625 RPM and the alternator output is considerably reduced even with the smaller pulley.

PX-5 Ford E-Series Overview

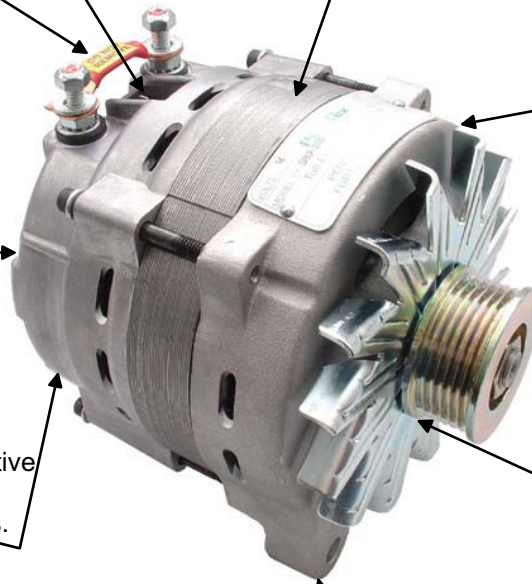
PennTex brush assemblies feature carbon copper brushes for maximum performance and brush life.

PennTex utilizes a unique dual positive output post with a connecting copper strap for improved output and heat dissipation.

The negative heat sink design on the PennTex alternator is incorporated into the rear frame. It uses six high temperature 60-amp press fit diodes, thus utilizing the entire frame for cooling. This design has more rectification and increased heat sink surface area for maximum cooling.

PennTex manufactures a large positive rectifier assembly with twelve high temperature 60-amp press fit diodes. The PennTex rectifier will provide superior cooling by increased rectification and a larger heat sink surface area. It also features two 5/16-inch output posts to handle larger electrical loads and cable connections.

PennTex designs and manufactures external regulators with premium quality components and modern assembly techniques. Our regulators are housed in a specially designed aluminum extrusion for maximum cooling.



The PennTex stator, manufactured at our Texas facility, uses a large copper wire gauge. This increases current carrying capabilities and extends service life. Our wire is heavy rated by the manufacturer for high temperature and insulation thickness.

PennTex uses a high output, high quality rotor which is balanced using a dual plane balancer at our manufacturing plant in Texas. It features two heavy-duty coils for maximum output and durability.

PennTex uses NTN brand bearings that are internationally recognized for performance and reliability. Our bearings are double wide for extra lubricant capacity and utilize high temperature polyacrylic seals and high temperature Kyodo Yushi grease for extended bearing service life, especially in high heat environments.



The **PennTex PX-5 Series Charging System** is rated at 14V with 230 and 250-amp models for the Ford E-Series gas and diesel applications. Our system uses external regulation for better performance and easy system diagnostics. The regulator harness features high temperature loom and GXL wire and is designed for easy installation.

Servicing the Bus Industry for more than a decade with
Performance, Endurance and Satisfaction!



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