

SVE BULLETIN

SPECIAL VEHICLE ENGINEERING – BODY BUILDERS ADVISORY SERVICE

E-Mail via Website: www.fleet.ford.com/truckbbas (click "Contact Us")

Toll-free: (877) 840-4338

QVM Bulletin: Q-288

Date: 10, July 2018

2019 Model Year Super Duty Gas Ambulance Alternator Output

Models Affected: 2019MY Super Duty Chassis Cab with 6.8L Gas Engine and Ambulance Prep Package only

Background: Beginning 2019MY, Super Duty F450/550 Chassis Cab with Ambulance Prep Package will be available with the 6.8L Gas engine. The 6.8L engine is only available with a single 240 Amp alternator.

Charge Margins: The ambulance builder is required to perform an electrical load analysis to ensure that the aftermarket equipment installed is appropriate to the application. Vehicle total electrical loads must not exceed the Maximum output of the alternator at normal (200°F) operating temperature. Refer to the 240 Amp alternator output curve provided in figure 1 (see page 2).

Alternator output varies with engine speed and ambient temperature. The worst case scenario for ambulance vehicles is when the vehicle is idling for long periods of time on a very hot day. Lower engine speeds while idling, coupled with high underhood temperature that may approach 93°C (200°F), combine to minimize power output from the alternator. At the same time, electrical demand on the vehicle may be at its highest due to some aftermarket electrical loads experienced in emergency situations at higher ambient temperatures.

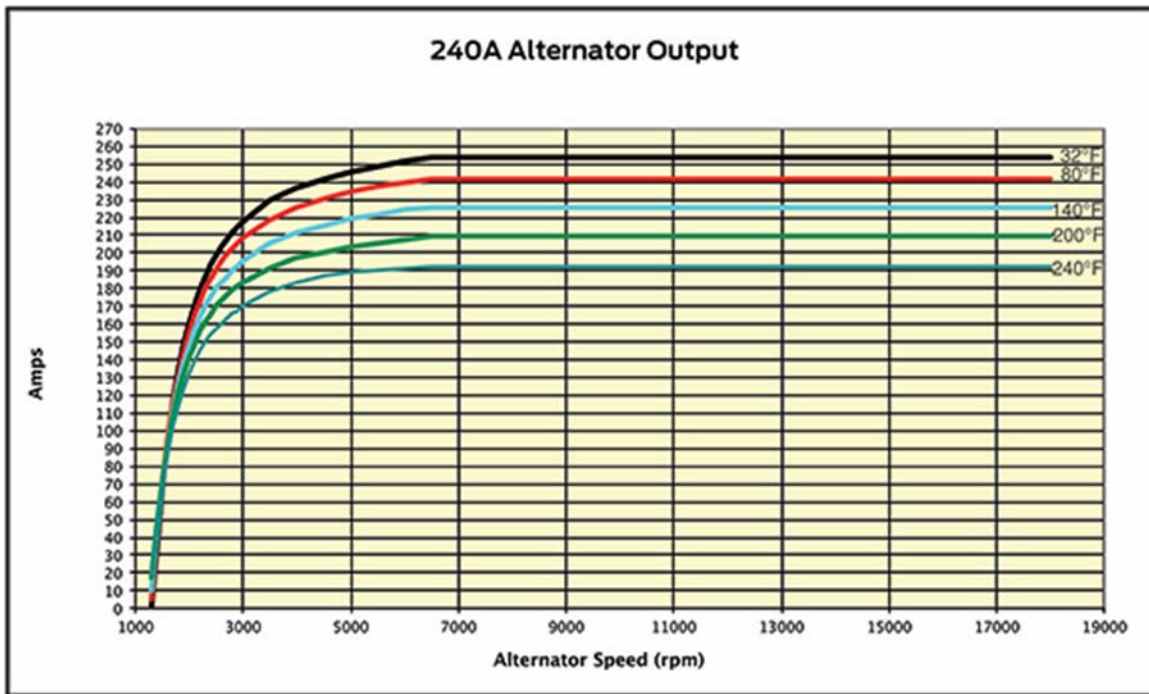


Figure 1: 6.8L Gas V10 240 Amp Alternator curve, Pulley Ratio - 2.95:1

Refer to the Body Builder Layout Book for guidelines and recommendations. If you have any questions, please contact the Ford Truck Body Builders Advisory Service as shown in the header of this bulletin.