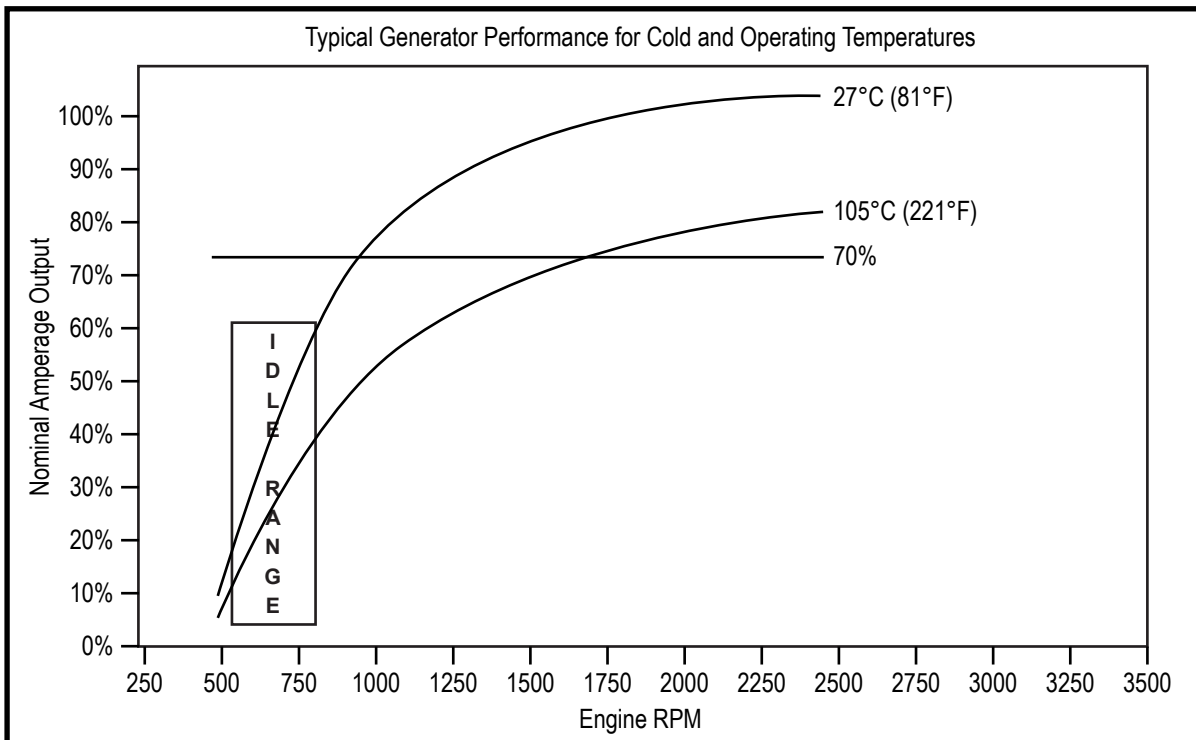




HOT WEATHER AND CHARGING SYSTEMS

With summer here, now is a good time to take another look at the effects of heat on the charging system. We often say that heat is the number one enemy of an alternator, and that is true, but besides destroying alternators outright, heat also has a pronounced effect on an alternator's output.

In Installer clinics, we talk about a GM TSB that shows that at idle, alternator output is only about 35% of full rated output. The TSB graphs alternator output from 250 RPM through 3000 RPM and emphasizes the point that an alternator will not achieve its rated output until engine speed reaches 1800-2000 RPM. But as a careful look at the bulletin shows, this is for an alternator at 81°F – a cold alternator. A second curve on the same chart shows that the same alternator at 221°F – a warm, but not hot alternator – produces 20% less output at the same RPM.



From GM TSB # 02-06-03-008A

Courtesy of OE+

