4G Rectifiers

Use care when building 4G alternators that use PCM-controlled regulators. Using the wrong rectifier can leave you scratching your head and condemning the wrong components.

There are two types of 4G rectifiers. They are identical except:

- Rectifiers for use with non-PCM-controlled regulators have only a *Stator* contact point as shown in *Figure 1*.
- Rectifiers for use with PCM-controlled regulators have a *Stator* contact point and a *B*+ contact point as shown in *Figure 2*.

This is important, because PCM-controlled regulators receive field current from the B+ contact point on the rectifier. The earlier non-PCM-controlled regulators receive field current from the A wire and do not need this contact point.

The important things to remember are:

With a non-PCM-controlled regulator, you can use either style rectifier.

With a PCM-controlled regulator, you must use a rectifier with both contact points. If you use a rectifier with only a *Stator* contact point, the regulator will not work, because it will not receive any field current.

Most aftermarket companies are producing only rectifiers with both contact points, so you can stock one part that covers both applications.

Figure 1 Ford 4G Non-PCM-Controlled Regulator

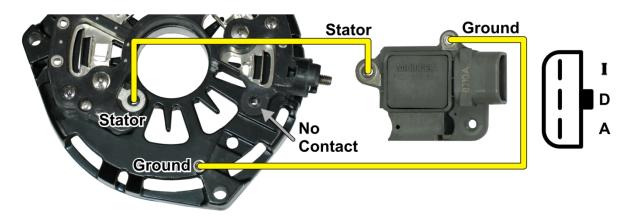


Figure 2 Ford 4G PCM-Controlled Regulator

