

ALTERNATORS or GENERATORS

Is a generator or an alternator the best choice for your Model A? Today there seems to be a lot of interest in replacing that out dated Model A generator with a modern alternator. While the Model A generator worked well for how our cars were used when they were new, it may not be adequate for today's driving.

The Model A generator has 2 major shortcomings. First of all, the Model A generator is designed for a maximum of 18 amps. This is adequate for a stock Model A but this may not be enough if owners have added electrical components which require additional power. Secondly, the Model A generator has a constant output regardless of the state of the charge of the battery. For example, if the generator is adjusted for an output of 7 amps, the generator will put out 7 amps even if the battery is only partially charged or if the lights are in use. The Model A generator can be modified so the output will automatically vary depending on the state of the charge of the battery and the power required for the electrical components in use but the maximum output is still limited to 18 amps.

Alternators have greater output capacity than a Model A generator and also incorporate an automatic regulating system where the output is varied depending on the state of charge of the battery and the electrical components in use. Keeping the battery fully charged will greatly help when starting your Model A and you will also find the lights will be brighter. Replacing the original generator with a 30 amp positive ground alternator is very easy to do and does not require any modification to the original Model A electrical system. Some owners like to replace the original 20 amp ammeter with a 30 amp unit but this is not absolutely necessary. Kits are available from most parts suppliers that include the alternator, mounting brackets and instructions.

For those owners who do not like the modern look of the alternator, there is also available a custom designed alternator that looks more like the original generator.

A 6 volt, 30 amp alternator will do a good job of keeping the battery fully charged and providing the power needed for additional electrical components. Alternators with greater than 30 amp output will require modifications to the electrical system and are not recommended for most applications.

TECH TIP

When replacing the generator with an alternator be sure to follow the directions and pay particular attention to the alignment of the alternator pulley with the water pump and crankshaft pulleys. The alignment of the pulleys is more critical when using an alternator because it is necessary to adjust the fan belt tighter for proper operation of the alternator. Misaligned pulleys will cause undo load on the water pump and alternator bearings and the fan belt. Severe misalignment will sometimes cause the fan belt to want to jump off the pulleys.

Because it is necessary to adjust the fan belt tighter, more stress is put on the fan and hub assembly where it mounts onto the water pump shaft so be sure the water pump shaft nut is kept tight. This is especially important when using one piece aluminum fans or fans with aluminum hubs.

