

Teck-Talk, cont.

The Fairmont 6 volt Generator System

Those folks who wish to keep their older motor-cars original in looks and function, soon have to deal with the generator system on the Fairmont engined cars. The 6-volt generator supplied by Fairmont on the two-cycle cars is rated at about 15 amps. It is a small capacity unit, not designed for heavy electrical loads. Typical loads are:

40 watt headlight	6 amps
Tail light	2 amps
Wiper	3 amps
Ignition	less than 1 amp
Stoplight	4 amps

There are two different generators supplied by Fairmont. Although they look alike they have different part numbers because they turn in different directions, and the third brush has a different location. The single cylinder cars turn the generator in a clockwise direction (viewed from the pulley end), but the Fairmont twin-cylinder and belt S-2 cars with transmission, rotate it counterclockwise viewed from the pulley end.

The output is increased by moving the third brush in the direction of rotation. The output current rises with speed up to a peak and then falls slowly to a lower value at higher speed.

Sometimes a generator needs to be repolarized. This reestablishes the magnetic field in the case and the armature that gets the generator started. It is done by momentarily connecting the battery to the field terminal. Only a quick touch with a clip lead is necessary.

Generators need a few drops of oil in the cups to lube the bearings from time to time. Too much oil in the brush end can soak the brushes and lead to poor operation. There is no need to run the belt tight because this only loads the bearings. After all the belt is only transmitting about 1/6 HP.

Due to the low electrical load on a generator-equipped car that does not have a starter, there is no need for a huge battery, except as ballast. The sealed lead-acid (VRLA) batteries from Yuasa and others at electronic supply stores are entirely adequate at 15-20 amp-hours rating. They are smaller than wet batteries, never leak acid, withstand vibration, and cost no more than a conventional wet battery. They should last as long as your car. Avoid cheap motorcycle batteries that will leak and destroy your ignition box.