

## *Service* BULLETIN

### Don't Generate Trouble

Generator trouble is indicated by a failure of the ammeter to register a charge. Occasionally, it is indicated by a magnetic or singing sound in the generator.

If this condition occurs, the reason may be in the cutout. Often times the trouble is due to a dirty or oily commutator. The usual practice if the ammeter fails to register a charge is to place the ends of a pair of pliers across the cutout terminals as shown in Figure 1, while the engine is running at a speed equivalent to 20 miles per hour. If the ammeter stops registering when the pliers are removed, the trouble lies in the cutout, and a new cutout should be installed. However, if the problem is caused by a dirty commutator, and it happens frequently, a simple solution would be to install an "usually off" switch such as a door bell button between both terminals of the cutout. This switch is located near the driver's seat, and eliminates the need to keep opening the hood. To clean the commutator, loosen the dust cover bolt "A" and take off the cover as shown in Figure 2. With engine running, hold a strip of fine grade 00 sandpaper against commutator "B" until commutator is clean and bright. Never use emery cloth, as this will short out the slots in the commutator.

Occasionally generators fail to charge because of dirt or carbon deposits from the brushes lodging in the slots between the commutator bars. This condition can be noted by visual inspection, and the foreign matter removed with a small stiff wire.

A generator which functions properly should run steadily, and draw approximately three to five amperes. When the speed of the generator is slackened by holding the coupling, a reading of 18 to 20 amperes will be obtained before the armature stops revolving.

If ammeter registers two amperes or less, check for broken or loose field connections. Make sure that all connections are soldered tight.

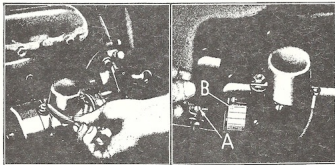


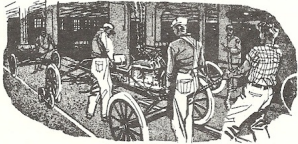
Fig. 1

Fig. 2

If the generator runs, but the ammeter hand flutters, it indicates armature trouble. The armature should be removed and checked for shorts and grounds using a test light.

If the generator runs and the ammeter registers over five amperes, it indicates either a ground in the fields, which can be checked with a test light, or a tight bearing. If a bearing is tight, it should be removed and either cleaned or replaced.

Brush and spring troubles can be noted by visual inspection. If brushes are worn, undersize, chipped, or springs are broken or weak, they should be replaced. When new brushes are installed, it is necessary to sand them to insure brushes seating squarely on the commutator. The brush ends should have a 75% or better bearing on the commutator. When brushes stick in the brush holders, the insides of the holders should be checked to see that they are smooth and have no burrs. An oversize brush should be dressed down until it fits the holder evenly.



## The Model T Ford Its Service And Repair

by Lester A. Klee, Technical Editor

### Preventing Generator Damage

Every time the storage battery is disconnected or removed from your Model T, it is all important that the generator be grounded at the same time. If the generator is not grounded, it may be severely damaged. The sketch below shows a method that can be used to properly ground the generator. Usually a double strand of baling wire or equivalent is used. The wire is fastened to the cut-out terminal and grounded on the brush assembly screw.

