

# Servicing Hints for Generator, with Generator removed from Vehicle

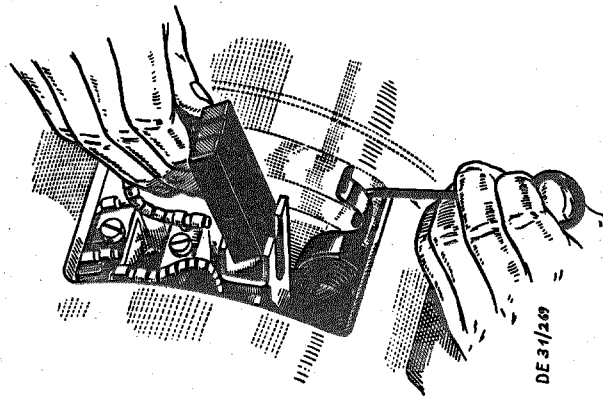
Job No.

15—12

The generator must be removed from the vehicle for servicing (see Job No. 15—11).

## Carbon Brushes

Under the normal service scheme, the carbon brushes must be examined after 48,000 km unless the conditions in which the vehicle is operating (dust, dirt, etc.) require that the examination be carried out more frequently.



Checking the carbon brushes

Fig. 15—12/1

After removing the cover band, the spring which presses the carbon brush onto the collector, should be raised by means of a hook. (Do not bend the spring to one side and do not raise it more than necessary). Then make sure that the carbon brush can be easily moved in its guide in the brush holder. The brush and the brush holder must be free from dust, oil, and grease. If these parts are fouled or sticking and the brush does not make contact with sufficient pressure on the collector, they must be cleaned with a clean gasoline-soaked rag (not with cotton waste) and well dried. Never use emery paper, a knife or a file on the contact surface of the brush! Thoroughly blow out the brush holder with compressed air.

If a brush is broken, has come unsoldered or is worn to the point where either the spring or the stranded wire soldered into the brush is in danger of fouling the brush holder, it must be replaced. When inserting the brush, care must be taken to ensure that the spring does not strike hard against the brush. Always replace all brushes and only use the specified type for replacement!

## Collector

The condition of the surface of the collector is extremely important for the proper functioning of the generator. The surface of the collector should be uniformly smooth and grey-black in color; it must also be free from dust, oil, and grease. The collector must also run perfectly true and without radial

deflection, since otherwise the carbon brushes will bounce in consequence of the high spots and will arc, thus interfering with the proper supply of current. Fouled collectors should be cleaned with a clean gasoline-soaked rag (not with cotton waste) and well dried. Scored and out-of-round collectors must be conditioned by precision-turning (see Job No. 15—13). Under no circumstances must emery paper or a file be used on the collector.

### **Lubrication**

The generator is fitted with ball bearings (annular grooved bearings). These bearings are packed with special grease. No further lubrication is therefore necessary.