

## The dynamo can be tested in 2 ways

- 1. Connected to a running motor, measure the voltage generated.
- 2. Connected to a battery, i.e. without load, measure the voltage generated.

## 1. Dynamo test



Objective: this test provides insight into whether sufficient power is generated and whether the voltage increases as the speed increases.

Disconnect connections D+, D- and DF (mark!) from the alternator and remove the dust strip to be able to assess the carbon brushes.

The dynamo is therefore mounted on the engine and is driven by the V-belt.

Connect the DF and D- together with a wire and connect a voltmeter to D+ and D-/DF. Start the engine and let it idle. Increase the speed slowly until the voltage level of 20 Volts is reached.

The engine doesn't even run that fast now. Do not let the speed rise too high because the voltage will then exceed 30 Volts and that is not the intention.

For the 6 Volt dynamo, the voltage may not exceed 10 Volts.

For the 12 Volt dynamo, the voltage may not exceed 20 Volts.



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## 2. Engine test



Direction of rotation as a dynamo

If necessary, install an ampere meter.

Purpose: by running the dynamo as an engine without load, the general functioning can be immediately deduced. The operation of the carbon brushes and the collector can be properly assessed, as can the condition of the 2 ball bearings.

To get an overall impression of the condition of the dynamo, it can be connected to a battery, causing it to run as an engine without a load.

This is probably also the best (and fastest) way to get immediate results.

The dynamo now runs at a quiet speed as an engine, if all goes well.

The operation of the carbon brushes (sparking or not) can be clearly assessed.

The direction of rotation of the motor must be the same as the dynamo, see the arrow on the dynamo housing.