

# Moto Guzzi Nuovo Falcone electronic ignition

Original information: [www.street-toys.de](http://www.street-toys.de) More information: [info@street-toys.de](mailto:info@street-toys.de)



The Moto Guzzi N.F. mechanical auto advance unit is a well known weak point and caused a lot of dead engines.

I had two Bosch ignition boxes from a Ducati Pantah or a Moto Guzzi V50 model. These boxes are quite suitable. Unfortunately they are only available as used parts! Part number: 1 217 280 034 (other boxes may also work, test it).

The auto advance curve is not identically with the mechanical advance but works well with the Falcone. I can't feel any difference in driving and overheating is not any longer a problem. With the shown application low rpm advance is at 12.5 degrees. At high rpm (>3000) advance is 35 degrees. I use that ignition since more than 8.000km and had never any problems.



A round aluminium part with an additional flat steel part is used as trigger unit (pic. 2). The steel part must be made of magnetic steel (i.e. ST37). In that case stainless steel is not the best choice!

The steel trigger should pass the pick up coil very closely at around 0 degree position.

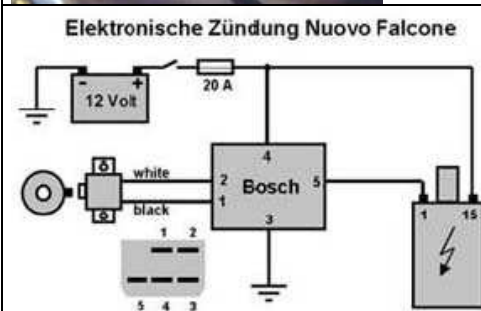
Several tests with different measures of the steel plate (1mm - 6mm) showed no significant influence to the auto advance curve. But there is some influence by the gap between pick up coil and trigger plate. The gap should be as small as possible (i.e. 0,5 - 1 mm).



The trigger unit has a center hole of 11 mm and is hold by a washer fixed at the top of the camshaft. The washer's centre hole has a "V"-shape and needs some grinding to fit exactly on the top of the camshaft.

To adjust the base setting the washer has 3 banana-shape holes. By moving the trigger unit the precise base setting can be adjusted.

The Bosch pick up coil needs some minor mechanical changes to fit into the housing. I fixed the coil at the existing threads of the original capacitor.



The wiring is not very complicated. Take care for the pick up coil polarity. Supply and ground connection should be carried out very carefully with short and solid wires to avoid EMI.

The ignition coil should be a 3 ohms type, i.e. car coil for conventional or electronic ignitions. I use a Bosch coil (red series) for electronic ignitions.

Fixed the ignition box at the frame under the fuel tank next to the regulator. At that place it gets enough cooling and wiring is easy.