# 31.10.2007



# Installation V1.3

# Jawa 250, Jawa 350 CZ125, CZ175, CZ250

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## **Safety Instructions**

All the mechanical and electro edits of the ignition and all its components must be made always when the power supply is switched off.

The electronic ignition works with the safe voltage up to 25V but it also switches the induction load that causes the voltage of several thousands volts. Danger of the electric shock!!!

The ignition advance setting engineered by hand turning the engine crank must not be realized when the power supply is on because the mixture in the cylinder might spark and the engine can turn hard. Danger of an accident to your hands!!!

The ignition includes the function to disconnect the excitation. Its activation causes generating the spark. Danger of accident to your hands or electric shock!!!

#### The origin reading hammer sensor



#### **Removing the hammers**



1. Screw hammers and capacitors off

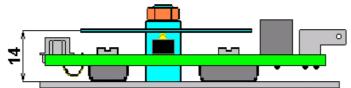


2. Grind the hammer axes away



3. Screw the ignition board through the distance pillar 4,5mm

# The side view of the ignition board and shading sheet metal



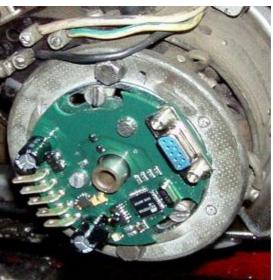
Before screwing the ignition board it is necessary to cut the distance pillars 4,5mm to put the high power transistors as tight as to the metal supports because of cooling and vibrations!

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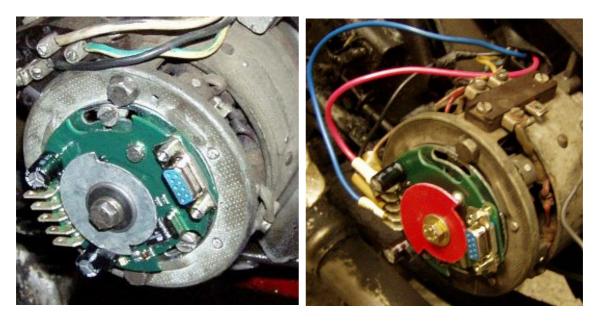
The installation of ignition unit





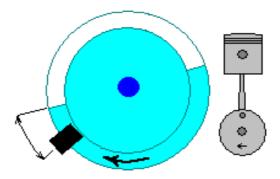
1. Insert the shaft (see appendix)

2. Screwing the ignition board down



3. Screwing the shading sheet metal set to 28° advance (26-30° according to engine type)

Screwing the shading sheet metal set to  $30^{\circ}$  advance. The advance setting can be realized by turning the engine to the upper dead point of the first cylinder and turning the shading sheet metal to the third long line ( $3x10^{\circ}$ ) displayed on the shading sheet metal, see the picture on the right.



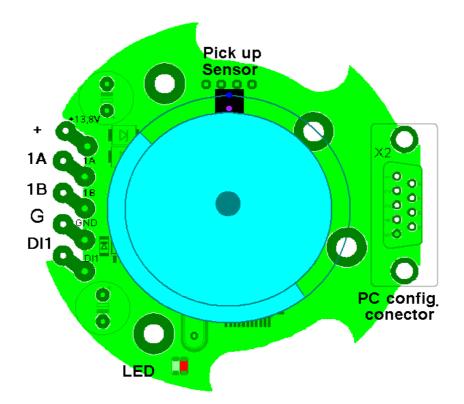
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#### Installation

The power supply and all ignition inputs are protected against the over voltage or reversing of polarity. These states cannot be permanent because the safety components may get overburdened and part or full damage of ignition function may happen.

The ignition outputs are not insured against the short circuit and the direct joining of outputs 1A, 1B to a supply terminal (+) must not occur. The joining to impedance which would cause exceeding of permitted current and following destruction of existing switch on component in the ignition is impermissible.

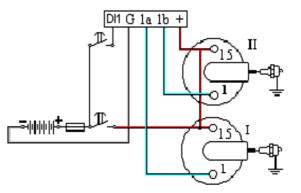


# Connecting the conductors

- 1. The conductors from the origin hammers are switched over onto the ignition
- 2. The ignition voltage can be leaded from the inductors (inductor 15)
- 3. Earth terminating can be realized straight to the metal board or the alternator.

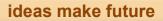
### The installation scheme

This basic installation scheme shows the option of two inductors.



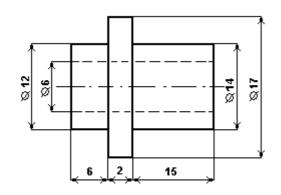
**Note:** The input DI1 does not have to be connected, it is only an extended function For the engines with one inductor there is only one output 1A integrated.

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Appendix



The shaft can be made of steel log ø 17 or straight of original hammer cam shaft. Just make a thickness shaft turnery to ø 14mm according to the scheme and then shorten the length from the touch area to 15 + 2mm.