

HPI wants to thank you for your confidence in its products.  
Please read this manual carefully to ensure years of enjoyment of this specialised high end electronic device.  
This manual shows you how to properly install the CDI-unit, wiring loom, rotor disk, pickup and HT-coils on your engine.

### Pickup Installation (see picture):

- Place the pickup so the metal receiver is at a distance of **33 to 33.1 mm** from the axis centre line or at **0.5 to 0.6 mm** from the leafs of the rotor disk.
- Along the axis, the leaf's middle must be aligned with the middle of the metal receiver on the pickup.

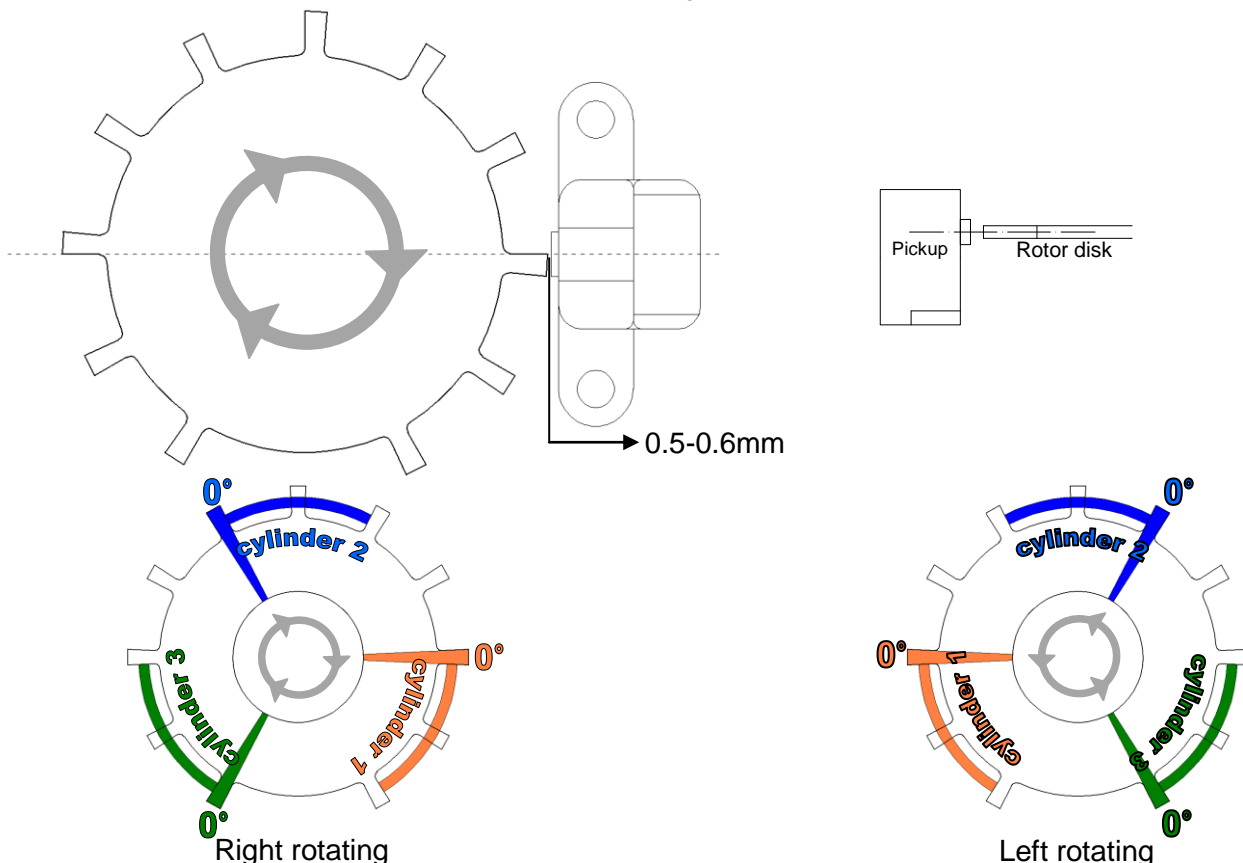
Only with this setup, the pickup will guarantee a reliable signal to the CDI

### Rotor disk installation:

The rotor disk has to be placed on an axis which rotates at the engines RPM (crankshaft).  
Each cylinder will react to a different set of leafs. (see picture)

- Make the necessary adjustments to the axis or the rotor disk to fit, or make an adapter between the axis and rotor disk.
- Remove the spark plugs and turn a cylinder in its Top Dead Centre. Use a micrometer to make a correct measurement.
- Call this cylinder "*cylinder 1*"
- Follow the colour code to determine the correct position of the rotor disk (orange corresponds to cylinder 1)
- Place the rotor on the axis and align the leaf that corresponds with 0° advance of cylinder 1 with the pickup. See picture.
- **The falling edge of the tooth should be aligned with the middle of the metal receiver of the pickup.**
- Tighten the rotor to the axis in this position.
- Turn the crankshaft 120° and check if the second cylinder is in the top dead centre (blue corresponds to cylinder 2)
- Turn the crankshaft 120° and check if the third cylinder is in the top dead centre (green corresponds to cylinder 3)

This position corresponds with 0° in the TuneBox software to program the CDI units.



### **ATTENTION**

**Use resistive spark plug with resistive spark plug cap (typically 5K)**



# INSTALLATION MANUAL:

## OSCILLATOR IGNITION 12V-0-3 cylinder Ø65mm

### 3 cylinder crankshaft mounted

HPI – Kuilenstraat 97, 3960 Bree, Belgium  
TEL: (0032) 089-46 74 39 | FAX: (0032) 089-47 33 28 | GSM: (0032) 0495-53 90 21  
Email: [hpi@hpi.be](mailto:hpi@hpi.be) | Website: [www.hpi.be](http://www.hpi.be)

### Installing the CDI unit:

Mount the CDI-unit to the frame.

- **power** red connect the red cable through the on/off switch to the 12V of the battery.  
black connect the black ring to the GND (earth or frame or battery ground)
- **powerjet** short grey connect this to the power jet. This will switch to ground at the programmed values. (optional)
- **Pickup** green/white connect to the cable of the pickup.  
blue/white
- **HT-coil 1** orange connect the orange cable to the HT-coil of cylinder 1  
black ring connect the black cable with ring to the bracket of the HT-coil and to the frame
- **HT-coil 2** blue connect the blue cable to the HT-coil of cylinder 2  
black ring connect the black cable with ring to the bracket of the HT-coil and to the frame
- **HT-coil 3** green connect the green cable to the HT-coil of cylinder 3  
black ring connect the black cable with ring to the bracket of the HT-coil and to the frame
- **Kill switch** black/white connect the black-white to GND / frame for an emergency stop.  
this **does not shut down** the CDI unit! Use the on/off switch under normal circumstances
- **Curve switch** yellow connect the curve button to these wires. (optional)  
yellow/green switch the button to select the desired advance curve.

Connect the HT cable of the HT coils to the spark plugs of the corresponding cylinder. (orange = 1, blue = 2, green = 3)  
Fasten all the cables to the frame and keep them clear from hot places and moving parts.

### Remarks:

- connect the HT-coil to the frame. To minimize electrical interference, try to keep all other cables as far as possible from the HT coils and HT cables.
- the CDI-unit and cables must not be exposed to **mechanical stress**
- the CDI-unit must not be exposed to **excessive heat** (not behind the radiator, close to the cylinder or the exhaust)
- the CDI-unit must not be exposed to **electrical interferences** (not close to the ht-coil)
- the CDI-unit must not be directly exposed to **fluids** (water, gasoline, oil,...)
- **Do NOT** extend cables, this may cause interference and damage to the CDI or the engine.

### Programming the CDI-unit:

The advance curve(s) of all our programmable CDI units can be changed using the *TuneBox* software and a *USB interface*.  
With this powerful software tool you are able to design your own ignition curves to obtain maximum performance of your engine.

You can freely download TuneBox from hpi's website: [www.hpi.be](http://www.hpi.be).

To avoid damage to your CDI and engine, stop the engine and switch off the power to the CDI while programming.

### Contents of the set:

The 12V-0-3 cyl set is designed for 3 cylinder 2 and 4 stroke engines, crankshaft mounted.

- 1 CDI *1 or 2 curves programmable or non programmable*
- 1 Rotor disk *Ø65 mm with 11 leafs*
- 1 pickup *with connectors to the wire loom*
- 1 wire loom *with fitting connectors*
- 3 HT coils *with mounting brackets*
- 1 curve switch *comes with the 2 curve sets*
- Installation manual

## **ATTENTION**

**Use resistive spark plug with resistive spark plug cap (typically 5K)**