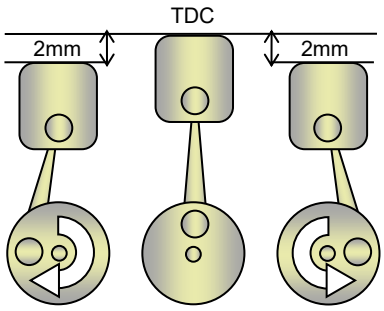
INSTALLATION MANUAL:
HPI 50 SX 1 cylinder 2 stroke
Digital universal inner rotor ignition

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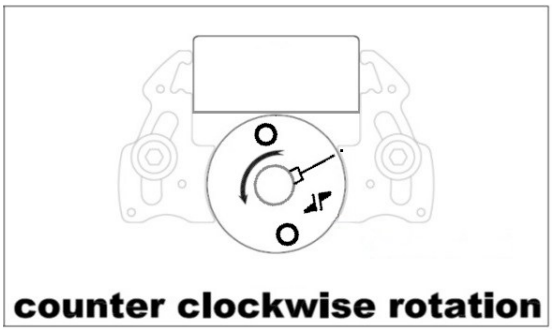
HPI wants to thank you for your confidence in its products.
Please read this manual carefully to ensure years of enjoyment of this specialised high end electronic device.
This manual shows you how to properly install the stator, rotor, CDI and HT coil.

Rotor - stator installation:

The rotor has to be placed on the crankshaft or on an axis which rotates at the same speed.



- Remove the original ignition from your engine.
- Depending on the engine's setup, a mounting plate is included in this set.
  This mounting plate serves as an adaptor between your engine and the 068 ignition.
  Fit the mounting plate on your engine.
- Locate the cable exit on your engine and position the stator according to this hole.
  If necessary, remove the plug (see backside) and lead the cable through the hole.
- Centre the stator on the mounting plate (if present) or directly on your engine.
- Gently bolt the stator to your engine; do not tighten the bolts yet.
- Place the rotor on the shaft, aligning the mark on the rotor with the mark on the stator.
  Mind the position of the KEY WAY, according the rotation direction; take the large marking in the middle. (See images below)
- This position corresponds with the maximum advance in the ignition curve. (see backside image)
- Fasten the rotor to the shaft. If necessary, remove the stator to have a good grip on the rotor.
- Remount the stator and recheck the position of the cylinder with a micrometer.
- If necessary, realign the markings by turning the stator plate.
- Fasten the stator plate.



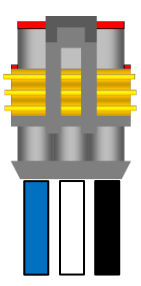
Wiring instructions:

- **HT-coil** black ring — Connect the black cable with ring to the bracket of the HT-coil and to the frame.
- **Stator** 3-way plug — Plug the 3-way connector of the stator directly into the CDI.
  If you need to lead the cable through a narrow hole; see back side to remove the plug from the cable.
- **Kill** black/white — Connect the black-white to frame / ground for an emergency stop.

Remarks:

- 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.

Stator connector wire sequence for digital CDI (HPI) unit (068C042E)



Optional Parts:

► *Tacho output* ◄

Connect the red cable of the CDI with the input of your tacho.

► *Curve switch – 068V064* ◄

For 2-curve CDI units (optional), the curve select button comes in handy.
It is easy mountable on your handle bar.
Makes or breaks the connection between the yellow and yellow blue cables.



► *TuneBox software – 068V043* ◄

With a digital CDI (optional), the TuneBox software and interface, you will be able to get the maximum performance of your engine. Design your own ignition curves, set **rev limiters**, drive a **power jet** exit and set the optimum **quick shift** timing for your engine, it's all possible with TuneBox.



Igntion curves:

