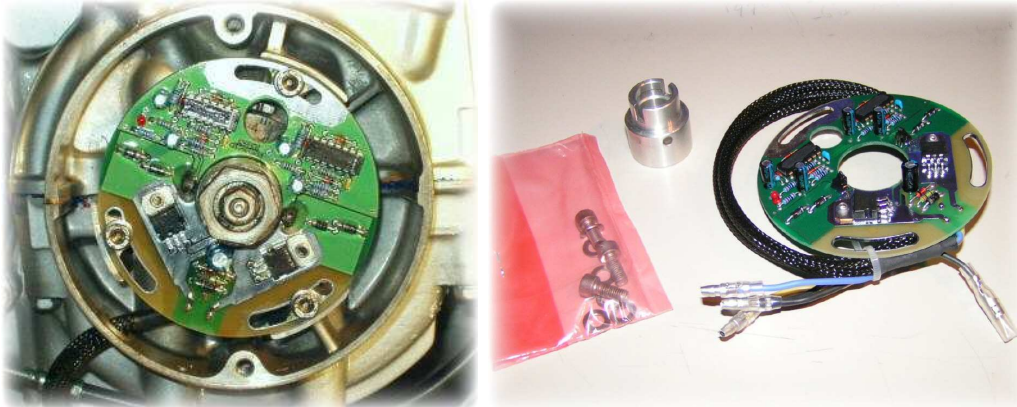


## **Electronic Ignition for HONDA CB350-400-500-550-750 Fours**



### **THE Accent SYSTEM**

The use of electronic ignition systems on motorcycles has shown a good performance over the last decades. Unfortunately, older types of motorcycles were equipped with standard contact breakers, and condensers.

For this reason, Accent has developed a modern, maintenance free, and easy to install ignition for a range of bikes which had tremendous sales figures all over the world: The HONDA SOHC-Fours.

**This Accent SYSTEM replaces the conventional plate, without any additional boxes!**

### **THE ADVANTAGES**

On the standard system, the breaker points will have to be adjusted or replaced every 3000 miles or 5000km. Also the condensers have to be replaced in a timely interval. Once you have installed the new SYSTEM, you will never have to perform any maintenance anymore. You will not have to check the timing, nor will you have to replace any parts that wear, since there is no wear in this SYSTEM. These will definitely save you time and money!

While running the bike, since it gets a better spark, it will start better, and will also pick up better in all RPM areas. Also it will run smoother, so you will enjoy your bike better.

Finally, when the engine is off, with the main power on (key-switch) and the kill switch in the on position, the SYSTEM will terminate the current through the coils, avoiding them to get hot, and also avoid the battery getting drained.

### **PREREQUISITES**

To install this SYSTEM you may need some basic knowledge of how ignition systems work on motorcycles. If you have not, common sense and a step-by-step instruction guide will help you through the installation process.

This system is developed for running with standard 5 ohm coils. If you need this system for use with lower Ohm coils, e.g. the Bol d'Or 3 Ohm types, you will have to order another rotor type. This concerns the 110 contact angle type. Please mention this while ordering.

### **HOW IT WORKS**

Two small magnets, which are located on the replacement rotor, will issue a signal to a hall-sensor. A hall sensor is a small piece of electronics that "switches" on or off as soon as it senses a magnetic field. In other words: when a magnet comes close, it switches on or off. The sensor-signal is amplified directly using power amplifiers. These amplifiers switch the coils on and off as it is done like using contact breakers.

## **WHAT YOU NEED**

You will need the following items to install the kit:

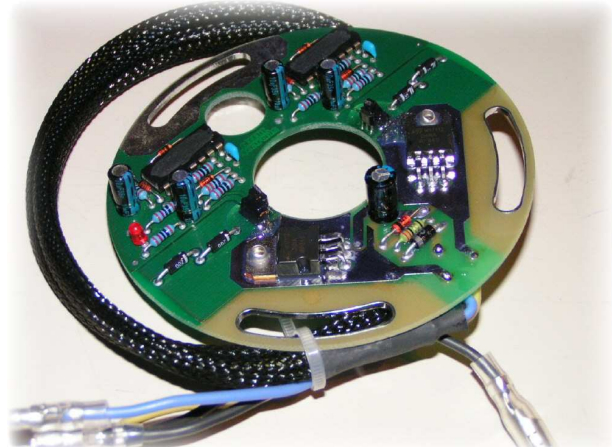
- the kit, supplied by your dealer
- tools to remove/install the chrome ignition cover (cross head screwdriver-standard)
- tools to loosen the standard points plate (cross head screwdriver-standard)
- tools to remove the cam from the advancer (wrench 23mm or 22mm and a 10-socketwrench)
- Hex-socket size 5

## **BEFORE YOU INSTALL**

**Please note that this SYSTEM will not cure problems that you may be experiencing with your bike. So, before you install this system, please check that your bike runs well and starts well, running on all 4 cylinders. If your bike has not run for several years, and it will not start right after you have installed this new ignition, please don't jump to the conclusion that it's probably the new ignition that is causing the bike not to start.**

## **HOW TO INSTALL**

In short you can say that the old points plate will be replaced by the new plate, including the wire that will connect it to the wiring loom at the spot near the air box. This chapter will provide a step-by-step installation guide. Put your main switch in the off-position before installation.



Pic. 1 On the left the conventional system; on the right the Accent SYSTEM.

- 1.** Remove the chrome metal plate ignition cover on the right side of your engine (right side when driving the bike). The standard cover has "HONDA" on it. This cover is (factory) fixed with two cross-headed screws.
- 2.** Remove the 10mm M6 nut or bolt that is in the centre of the old plate. You can remove it by turning the centre nut or bolt counter clockwise, having the crankshaft fixed using the 22 or 23 mm<sup>1</sup> wrench on the part that looks like a large bolt (as a matter of fact this is just a large washer).



Pic. 2 Nut-washer

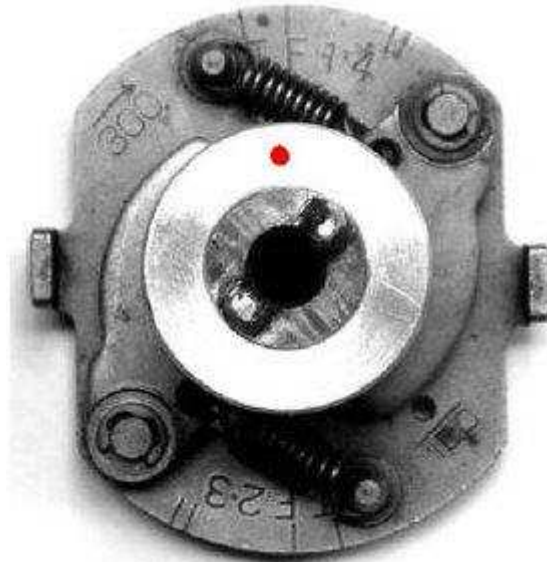
- 3.** Remove the 3 screws that hold the breaker plate, and remove the plate.
- 4.** Find the end of the wire that comes from the plate, and goes to the area of the air filter box. This is also on the right side of the engine. You will find some connectors there. The connectors coming from the ignition plate are blue and yellow. Note the routing of this cable.
- 5.** Loosen the blue and yellow wires from their connectors near the air box area.

<sup>1</sup> CB350 and 400 use 22mm, CB500, 550 and 750 use 23mm

6. Remove the breaker plate and the wire. NOTE: the advancer unit at the centre of the plate will come loose. Don't worry; it can only be mounted in one way.

At this point you should have removed the old ignition system.

7. Take the advancer, and remove the cam that can slightly rotate on the advancer.
8. Take the aluminium rotor that is provided with the kit, and mount it on the advancer using a small amount of grease or oil. The two weights may have to be pulled off from the centre a bit to fit them into the gaps of the new rotor. NOTE: there are two ways to install it: the red spot on the new rotor should point towards the TF14 marking. After having installed, check if the new rotor will actuate the two weights and springs, when rotating the rotor on the advancer. The new rotor should rotate smoothly on the advancer.



Pic. 2 Advancer: new rotor alignment

9. When installing the upgraded advancer assy on the crankshaft (where it was originally mounted) note the small fixing notch on the advancer assy. It should drop right into the same size hole that is located in the crankshaft.
10. Mount the new ignition plate, routing the cable through the hole (some models do not have this hole, but just a gap at the side of the engine). Use the 3 hex screws and washers that came with the kit. Do NOT fix the plate at this time; just make sure it touches the engine casting. Rotate the plate clockwise as far as possible. The sleeves will allow you to do so. Do not use extensive force.
11. Fix the bolt or nut that you removed in step 2. Fix the bolt or nut using common sense; not too tight. 6 lbft is the correct torque, when using a torque wrench. You will have to reuse the 22 or 23 mm washer. NOTE: check if the new plate is not contacting the advancer assy, in any position of the crankshaft. If you have any suspect that it does make contact, use the last 3 washers and mount them between the plate and the engine casting, using some grease. Now you will have: hex screw-washer-plate-washer-casting. (The grease will operate as 'temporary glue'.)

**WARNING:**

**People having pacemaker implanted should have the next steps performed by someone else. The voltage between the blue and yellow wires can rise up to 500 volts, causing the pacemaker to malfunction. The voltages at the coils side (which will not be touched normally during the installation of this kit) can reach voltages up to 40.000 Volt. This can also cause the pacemaker to malfunction.**

- 12.**Route the three-wire-loom that is connected to the new plate through the small brackets that held the old loom. Having done so, the loom should end at the air box area, where you disconnected the old loom in step 4.
- 13.**At the air filter area, disconnect the **2** black wires (male/female), that connect the rear brake switch to the main-loom. The new ignition loom needs a plus 12 Volts, which is the black wire. Connect the ignition loom to the black wires you just disconnected. These are two connections NOTE: Do not connect the blue and yellow wires at this time in order to prevent shock.

#### ADJUSTMENT

- 14.**Switch on your main current using the main switch (key switch).
- 15.**You MUST do this step: Take a 23 or 22 mm wrench, and rotate the crankshaft at least one rotation (360 degrees) CLOCKWISE. Note the red LED [or light] switching on during half of the rotation. The LED is located on the left side of the new SYSTEM..
- 16.**Look through the hole in the plate. Rotate the crankshaft CLOCKWISE until the F14 marking is aligned with the marking on the engine. If you rotate is too far, go back to step 15.
- 17.**Next, very slowly rotate the ignition plate COUNTER CLOCKWISE. At the angle that the LED lights, immediately stop rotating the plate, and fix it in the position it is currently in, using the 3 hex M5 screws. If you have turned it too far, do not turn it back. It will not cause the LED to dim. Go back to step 15 and all later steps. NOTE: use common sense when tightening the M5 screws. A printed circuit board is not a very fragile component, but it will surely break when you over tighten the M5 screws. Broken plates caused by over tightening will not be warranted.
- 18.**Once again, rotate the crankshaft at least one full turn clockwise, and check if the LED lights half of the rotation.
- 19.**Connect the blue and yellow wires (obvious: blue-blue, yellow-yellow) at the air filter box area.
- 20.**Check the rear brake switch for functioning.
- 21.**Replace the chrome ignition cover using a good or new gasket.

**Your bike is ready for use now, using the new system. Have fun!**

#### **WHAT IF.....**

\* .....the motorcycle will not start at all....

You are supposed to have checked the operation of the bike before you install this new ignition. If it did not run, the cause should be sought somewhere else.

Check if the main switch is on.

Check if the kill switch on the right handlebar switch assy is in the "on" position.

Check if all fuses are fine.

\* .....your battery discharges after you have installed the SYSTEM, and did not discharge before....

You may have installed non-standard coils; 3 Ohms instead of 5 Ohms. The coils take more current, and therefore need another timing. You can order another rotor from your dealer. This rotor will provide a contact angle of 110 degrees, instead of 180 degrees. Please mention this while ordering.

\* .....your coils heat up heavily after you have installed the system, and did not heat up before....

You may have installed non-standard coils; 3 Ohms instead of 5 Ohms. The coils take more current, and therefore will dissipate more heat. Also in this case the system will need another timing. You can order another rotor from your dealer. This rotor will provide a contact angle of 110 degrees, instead of 180 degrees. Please mention this while ordering.

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\*.....it breaks during operation...

Although this product is manufactured using the highest standards of technique, this product could fail. This product comes with a one year warranty.

\*.....I have a non-SOHC/4, like a twin...

This product is developed for HONDA SOHC/4 only. It may become available in future for other models and makes.

### **Included parts**

Number:	Description:
1	ELZ2coil printed circuit board including wires
1	Replacement aluminium rotor with 2 magnets inserted
3	Hexagon socket screw M5x12
6	Plain washer
1	Description

### **Technical Specifications:**

Operating Voltage:	Not less than 6 Volts DC Not more than 18 Volts DC
Contactangle	180 degrees (std) 110 degrees (option)
Coils	5,6 Ohm, (Genuine SOHC/4 coil)
Secondary voltage	At 1.000 RPM: 14.5 thousand Volts At 10.000 RPM: 11.4 thousand Volts
Power consumption with non running engine	< 1 Watt