

Installation & Timing Instructions for Electronic Ignition on 500/550/750 Fours

A



INSTALLATION

1. **Remove existing points and condensers.** Carefully remove outer rotor from your motorcycle's mechanical advance unit.
2. Install new rotor. Be sure to remove any shim washers at the base of the advancer shaft. Also check to see if there is a cast in pin also near the base of the shaft. This will need to be ground off to install the new rotor, see **figure A**.
3. Install new rotor so that the magnets are oriented toward 1 and 4 as in **figure B**.
4. Check the springs on advancer for tension. Make sure they are operating properly. Lubricate or adjust if necessary.
5. Install the new ignition plate with the electronic pickups already mounted. **DO NOT REMOVE** pickups from plate as shown in **figure C**.
6. Plug unit in as follows: locate rear brake light switch and disconnect the black wire. Plug the black wire from the unit into the newly vacant black wire coupler in the harness. Plug black wire from brake light switch into the female coupler connected to this wire. Connect yellow wire from unit to yellow wire on harness, and do the same with the blue wire.
6. Turn on power and static time unit using the instructions below.

B



TIMING THE UNIT - Use a basic 12v test light to time both sides of the ignition. **Do not attempt to set your timing using a dynamic timing light.** It will damage the triggers if the ignition plate is loose/loosened while the bike is running. This will cause a ground failure that will short the capacitors inside the triggers. A dynamic timing light may be used to check advance only. If adjustment is necessary, turn power off before making any adjustments or loosening the screws that hold the ignition plate on.

1. Plug the timing light in parallel with the yellow wire. This is in order to check the timing on the #2 & #3 cylinders.
2. Using either an adjustable wrench or a 22mm wrench (as provided in the stock tool kit) rotate the large nut on the end of the crankshaft clockwise. The timing light will be lit up brightly for most of the rotation. There will be a point (approx 40 degrees) before the "F" mark appears in the inspection window (for the #2 & #3 cylinders) that the light will dim. The light should come on again precisely as the "F" mark lines up with the cast pointer on the inside of the engine case. Note where the light comes on - do not make any adjustments to the plate or pickups at this time.

C



3. Repeat the process with the timing light in series with the blue wire (for cylinders #1 & #4). Note where the light comes on.

At this point you will have an indication of how to set the timing.

- If both sides appear to be early, rotate the plate clockwise.
- If both sides appear late, rotate the plate counter-clockwise.

Align the plate so that the #2 & #3 cylinder lights up precisely at the “F” mark. Then, adjust the pick up for #1 & #4 cylinder so that the light comes on precisely at the “F” mark. If one side is late and one side is early it may be necessary to adjust both pick ups. To adjust pickups, loosen the allen screws and carefully move them on the plate. **DO NOT REMOVE** pickups from plate. Do not force pickups if they are not moving easily.