

Indian Electronic Ignition Installation

Begin by starting and running your engine with the standard point ignition intact. This is done to make sure your bike doesn't have any problems to begin with (especially if it has been sitting dormant). Once you're satisfied that the bike starts and runs, let it cool down for a while before you start to install you ignition kit., then remove the spark plugs so you can turn the engine easily. If you follow these simple instructions, there is no need to go completely through the timing of the engine.

1. Remove the cap and rotor from the distributor.
2. Remove the spark plugs so the engine will turn over easily and use the kick starter to slowly rotate the engine until the narrow lobe of the distributor cam just makes contact with the rub block on the points. This is the point where the front cylinder is about to fire.
3. Remove the timing plug and check the flywheel timing marks, and line them up per your repair manual.
4. Remove the points, adjustable point plate, condenser, terminal stud and all insulating washers. You should now have a bare distributor.
5. Drop the module and base plate into place, and using the two screws from the adjustable point plate that you removed earlier, fasten it down.
6. Work the grommet into the hole in the distributor body where the terminal stud was removed. Shoot some WD40 (or similar) in the inside area of the grommet to make the wire harness slide through easier, then work the wires through.
7. Install the magnetic pickup rotor over the cam lobes of the shaft. The magnet on the pickup rotor closest to you should be pointed toward the module unit and the notch in the top edge of the distributor body. If the fit is tight, use a socket to tap the pickup rotor down until fully seated. If the fit is loose, it's not a serious problem. A dab of silicone on the cam then installing the magnetic rotor will keep it tight. The tolerance of the distributor cam grinding varies widely.

There is a paint dot on the top of the module that can be used as a firing point (where the old points would open). Since you already aligned the flywheel timing mark, set the magnet that front edge of the dot on the module by rotating the distributor housing. This will give you a rough timing setting for starting the bike, then fine tune when running.

8. Install your "hammerhead" type rotor and the distributor cap.
9. Slip the wire harness through the cloth wire loom and route the wire harness to the

coil for connection.

10. Using the supplied terminals (soldering them is highly recommended), slide a small piece of heat shrink over the wire, then install the terminals, slide the heat shrink in place and shrink it around the base of the terminal.

11. Remove the old wire from the (-) terminal of the coil that went to the distributor.

12. Connect the black wire to the negative (-) post of the coil.

13. Connect the red wire to the positive (+) post of the coil, and leave the wire there that goes to the ignition switch (you should now have 2 wires on the positive (+) post).

14. It's time to install the spark plugs and fire the bike up. Always start the bike for the first time the spark fully retarded to avoid any kickback! If you experience excessive kickback you have the timing too far advanced and you should adjust to eliminate it. Turning the distributor body clockwise will retard the timing. Turning it counter clockwise advances the timing. You should get little or no kickback even when starting with full advance when the timing is set properly.

Once the bike is running, loosen the top screw on the distributor clamp assembly, and slowly turn the distributor body to achieve the smoothest running position when the engine is warm (Make sure your advance grip is set to full advanced position when adjusting) . You may also find that you need to open the carb adjustment needles a couple clicks, due to the more efficient firing of the ignition system. Take a test ride, and make any final adjustments based on the position that provides the best throttle response without hesitation.

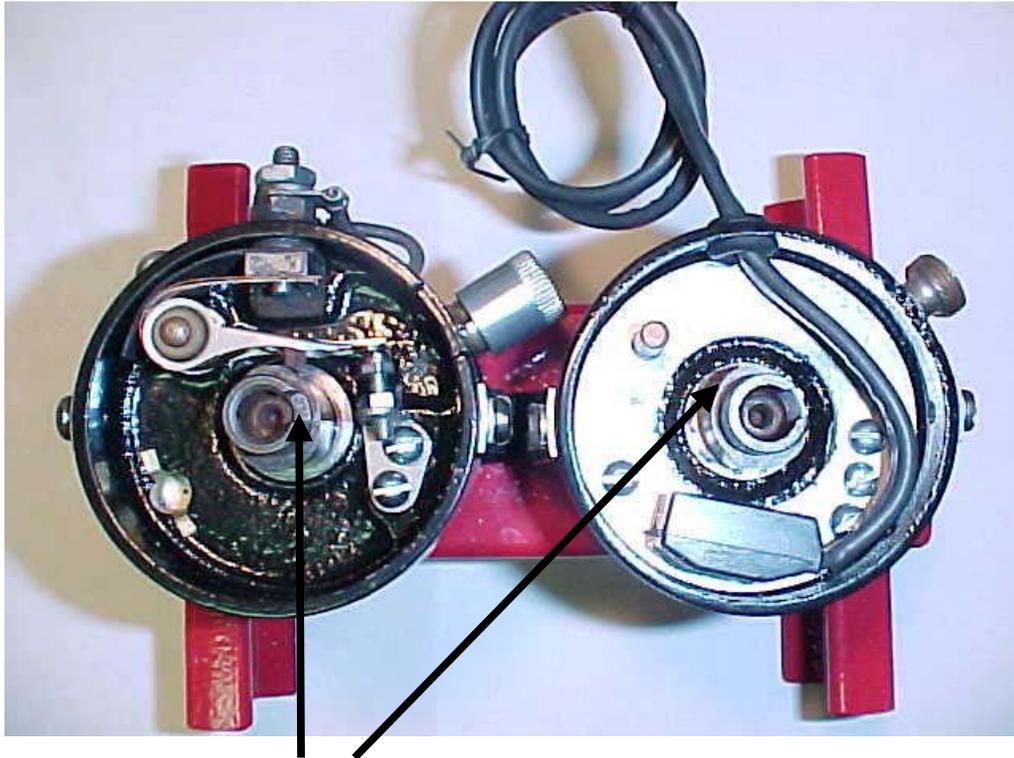
Some Tips when installing your Electronic Ignition

If your distributor has loose bushings this module will function with no problems. If the bushings are real loose be sure the magnetic rotor does not hit or rub the module. To install new bushings is not a hard job and does not require any special tools.

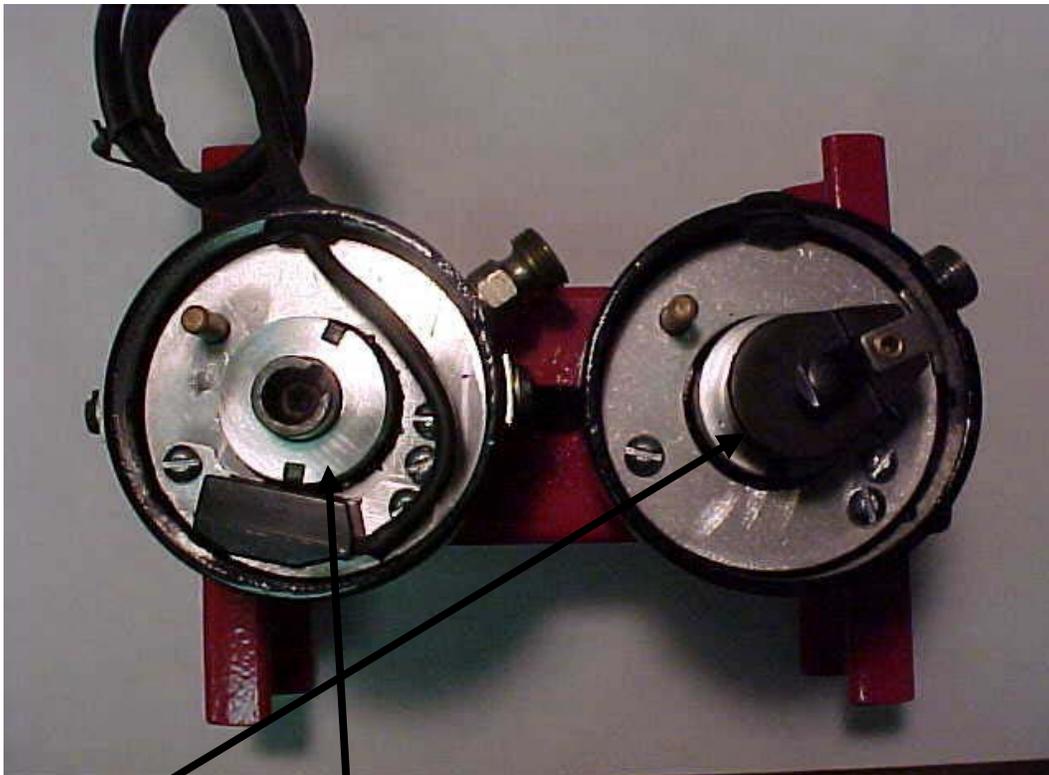
If the magnetic rotor does rub the module and the bushings are not that bad you will have to remove the module from the base and file the mounting holes in the module so you can get some clearance between the magnetic rotor and the module.

Some distributor cams have been ground or rusted so the magnetic rotor will not fit snug. If you have this problem you can put a dab of silicone on the cam and then install the magnetic rotor.

If you want to use an electronic timing light to set the timing a clear acrylic plug is now available that will screw into the timing plug hole.



Note the shaft position. The narrow lobe is touching the point contact rub block and just about to open the points in the left picture. This is the beginning of the front cylinder firing position. The one on the right is in the same position, and has the module installed, but not the pickup rotor.



In the photo above, the pickup rotor is now installed on the left unit. On the right, the contact rotor is now in place (module removed for clarity), and the cap can be installed. Note the “hammerhead” style rotor, and the firing position.

Electronic Ignition Timing Procedure

To set the timing for an Indian Chief with an electronic ignition or points:

1. Remove spark plugs. (This makes the engine turn over easier)
2. Remove timing plug (if you have one if not see #4b)
3. Crank engine so #1 cylinder (front) is coming up on compression.
- 4a. Continue cranking until timing mark (\$) is in center of timing hole.
- 4b. If you do not have a timing hole crank engine over until the rear exhaust valve closes and just has clearance.
5. Remove distributor cap
6. Fully Advance distributor with twist grip
7. Fasten a test light to the NEG terminal of the coil and the other lead or probe to a ground.
8. Be sure the small lobe and magnet clockwise from small lobe is near the module.
9. Loosen the distributor.
10. "Turn" or hold the rotor Counter Clockwise to take up any "play".
11. Turn on the ignition.
12. Turn the distributor clockwise until the test light comes on. This is when the #1 plug will fire. Tighten the distributor. (you may have to turn the dist counter clockwise first)
13. Check by retarding the timing with twist grip: light will go off. Then twist control to fully advanced the light will come on.
14. Turn off the ignition. Leaving the ignition on for an extended time will burn out the module or points.
15. Install spark plugs and timing plug.

Note: You can use your spark plug instead of the test light. Just be sure its is grounded so it will spark. You can also look at your amp meter as it will jump when the coil is to fire.

Thanks to Jim Seidell for this easy procedure.

For those who may have a timing light I do have clear Timing Plugs available that go into the timing hole.