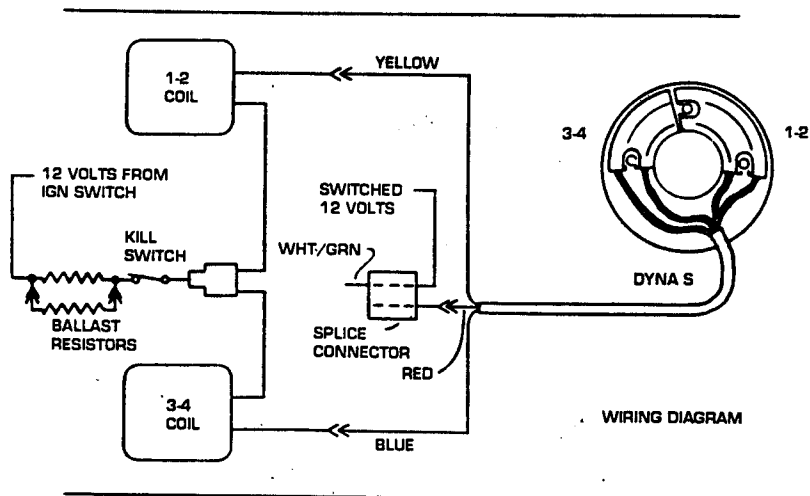


**DYNA S ELECTRONIC IGNITION  
INSTALLATION INSTRUCTIONS**

**PART NO. DS1-3 FOR HONDA GL1000 MOTORCYCLES**

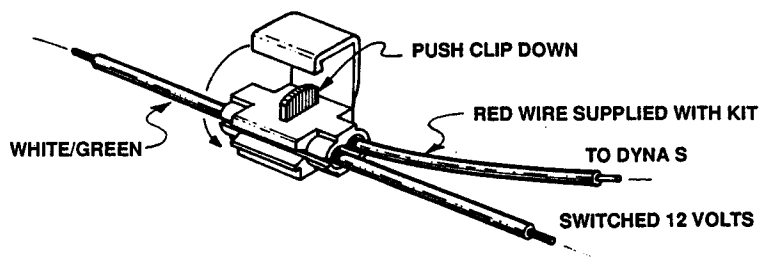
The DYNA S Electronic Ignition System replaces your entire points plate assembly and mounts in the original position. It was designed for use with stock coils, however, it may be used with other coils that have at least THREE OHMS primary resistance, in which case the ballast resistor will be bypassed.



**INSTALLATION PROCEDURE -**

- 1) Open the top and side compartments. Locate the two ignition coils and ballast resistor directly in front of the air cleaner intake. On some models it is best to remove the air cleaner for access to the coil area.
- 2) Unplug the wires from the ballast resistor. Connect the power resistor supplied with the kit across (parallel with) the ballast resistor, and reconnect the wires to the tabs provided. The resistor will become very hot during operation. That is normal, and not destructive to the resistor; however, care should be taken to keep cables and wires from coming in contact with it.

- 3) Locate the blinker relay just behind the fuse box in the left compartment. The white/green wire going to the relay carries 12 volts from the ignition switch. Using the splice connector provided, attach the separate red wire included in the kit to the white/green wire, as shown below. Do not strip the wires. On 1978 and 1979 models, the 12 volts can be obtained at the accessory terminal in the left side compartment.



- 4) Remove the points cover and battery cover.
- 5) Remove the 10 mm bolt holding the spark advance assembly to the engine.
- 6) Remove the screws holding the points plate to the engine. Disconnect the blue/yellow and yellow point wires where they plug into the wire harness and remove the entire point/plate assembly.
- 7) Notice that there are two other wires connected where the points plugged in. These are wires going to the condensers mounted in front of the battery. Unplug both wires and tuck them back out of the way. Do not reconnect.
- 8) Remove the spark advance assembly from the engine.
- 9) Remove the point cam from the advance assembly.
- 10) Coat the advance assembly shaft with oil. Place the DYNA S rotor on the shaft and while spreading the weights, push the rotor down until it engages the weights. Ensure that the rotor rotates freely on the shaft as the advance weights move out and back.
- 11) Install the advance/rotor assembly on the engine making sure the pin on the camshaft is engaged in the slot on the advance assembly. Install the washer and bolt, and tighten. Ensure that the rotor is still free to rotate.

- 12) Install the DYNA S using the screws previously removed. Orient the plate approximately as shown in the wiring diagram. Tighten screws, lightly.
- 13) Route the cable over to where the points originally plugged in. The grommet from the point cable may be used by slitting it with a razor blade to remove it.
- 14) Connect the wires with the blue and yellow bands to the receptacles where the original points connected, matching the colors.
- 15) Plug the red wire coming from the DYNA S into the red wire installed in Step 3.
- 16) This completes the installation. Make sure that all connections are secure and that all colors match.

#### TIMING PROCEDURE -

**NOTE:** The right module fires cylinders 1-2, and provides +/- 10° of adjustment. The left module fires cylinders 3-4, and is fixed. 3-4 timing is adjusted by rotating the plate.

- 1) To time the engine statically, connect a 12 volt test light from the junction of the blue coil wires to ground (engine case). Do not disconnect the wires. Remove the timing mark hole cap.
- 2) Turn ignition switch on. Slowly rotate the engine in the forward direction using the 12 mm generator bolt (see owners manual under timing) until the test light turns on. The F2 timing mark should align with the index mark on the engine case.
- 3) If the marks do not align, loosen the DYNA S screws and rotate the plate clockwise or counterclockwise as appropriate (.010 of sensor movement approximates 1°) and re-tighten screws.
- 4) Rotate the engine backward until the light goes out, and repeat Steps 2 and 3 until 3-4 timing is correct.
- 5) After 3-4 timing is verified, connect the test light to the yellow coil wire and repeat Step 2, using the F1 mark for cylinders 1-2. If it is necessary to adjust the 1-2 timing, loosen the cap screws holding the right module using allen wrench supplied with the kit; and move it clockwise or counterclockwise as appropriate, and re-tighten screws.
- 6) Recheck timing and adjust as necessary using the above procedure until proper timing is verified.

- 7) The engine can also be timed dynamically using a strobe light in the normal manner. Use the advance marks and an engine speed of about 2500 RPM (full advance).
- 8) After timing, replace the covers previously removed.

#### **PROBLEM DIAGNOSIS -**

The DYNA S Electronic Ignition is manufactured from the highest quality parts and materials available, using the greatest care possible. Many times operational problems are due to improper installation or intermittent connections.

During timing, if the test light remains bright at all times, it indicates that there is a bad connection in the wiring. Ensure that there is 12 volts at the red wire.

The DYNA S uses two identical power modules, one for each pair of cylinders. If loss of ignition on four cylinders is experienced, it is not likely to be caused by the DYNA S. The probable cause would be loss of 12 volts to the coils or to the red wire on the DYNA S.

If loss of ignition on two cylinders is experienced, remove spark plugs, replace in caps, and lay them on cylinder head. Turn engine over and watch sparks to determine which are missing. Disconnect (key off) the DYNA S output wires and reconnect them in reverse. If sparks transfer to opposite plugs, it indicates a bad DYNA S power module. If they stay with the same plugs, it indicates a bad coil, or a problem somewhere in the wiring.

If the bike fails to idle, runs poorly at low engine speeds but seems OK at higher speeds, a possible cause is a defective ballast resistor, or one of the wire connections associated with the part.

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