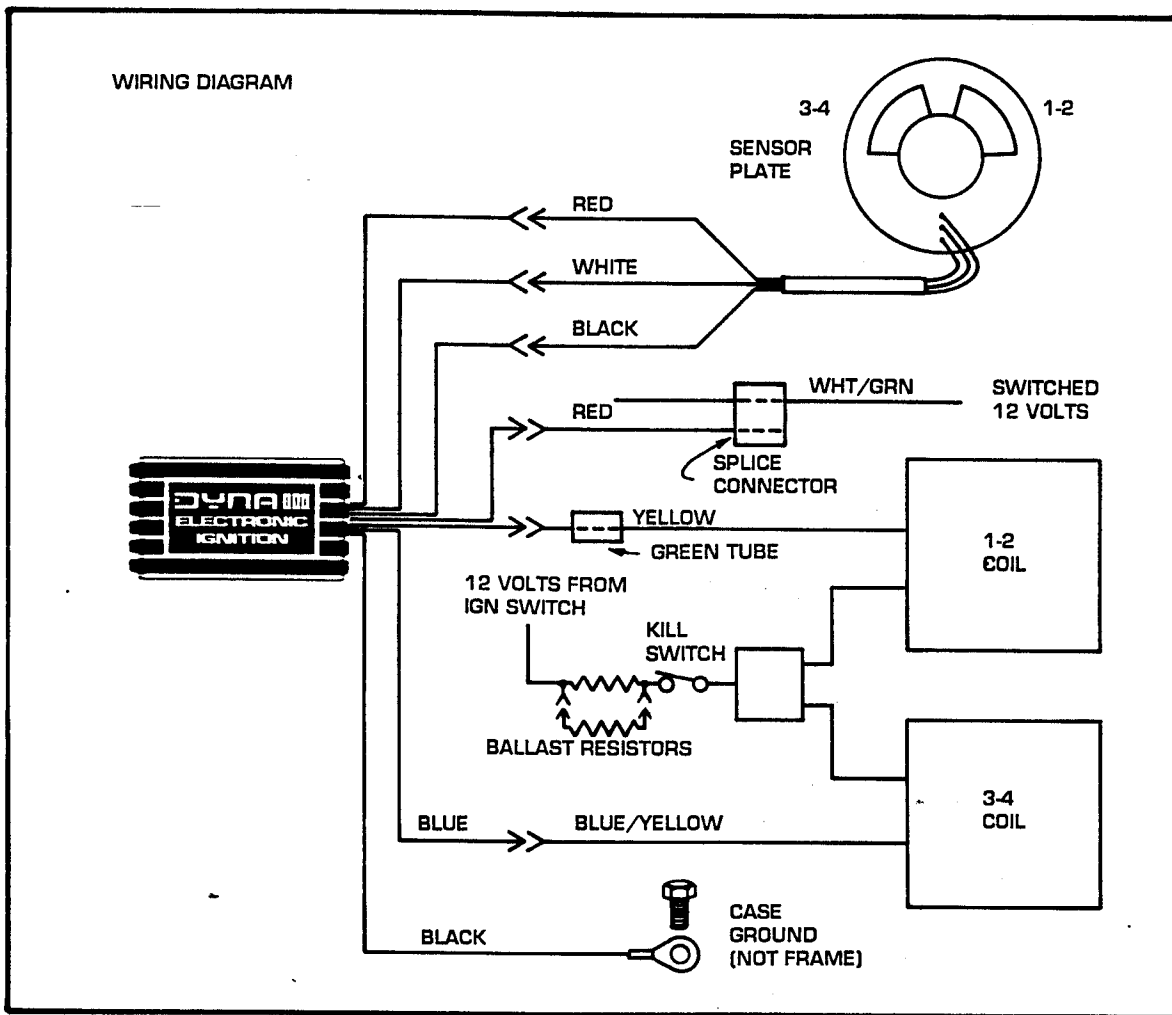


DYNA III ELECTRONIC IGNITION INSTALLATION INSTRUCTIONS

PART NO. D31-3 FOR HONDA GL1000 MOTORCYCLES

The DYNA III System 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.



PROCEDURE -

- 1) Fasten the clamp to the electronic module using the 4-40 x 5/16 screws and locknuts provided. The clamp and nuts go on the inside of the case. Do not use clamp if mounted inside compartment.
- 2) Mount the module in the location selected. Cut off excess clamp material if used.
- 3) Remove an engine case bolt and fasten the ground lug (black wire) securely to the engine. Do not attach to frame or carburetors.
- 4) 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.
- 5) 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.
- 6) Locate the blinker relay just behind the fuse box in the left compartment. The white and green wire going to the relay carries 12 volts from the ignition switch. Using the splice connector provided, (FIGURE 2) attach the separate red wire included in the kit to the above white and green wire. Do not strip the wires when using the splice connector. Use pliers to push the clip down.

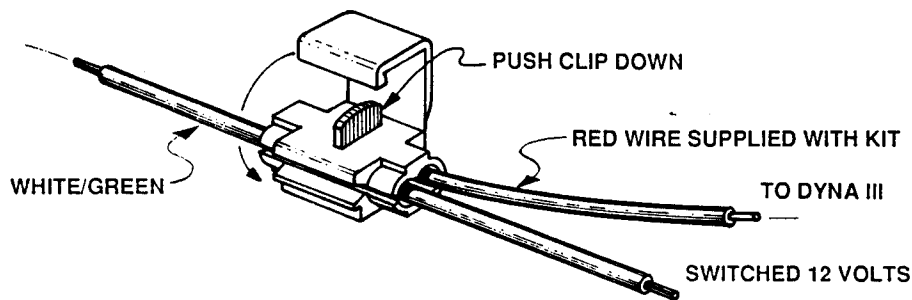


FIGURE 2

- 7) Plug the red wire coming from the electronic module into the red wire installed in Step 6.
- 8) Remove the point cover and battery cover.
- 9) Remove the 10 mm bolt holding the spark advance assembly to the engine.
- 10) Remove the screws holding the point 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.
- 11) 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.
- 12) Remove the spark advance assembly from the engine.
- 13) Remove the point cam from the advance assembly.
- 14) Coat the advance assembly shaft lightly with oil. Place the DYNA III rotor on the shaft and push it down until it engages the weights on the advance assembly. Ensure that the rotor rotates freely on the shaft as the weights move out and back.
- 15) 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.
- 16) Install the DYNA III sensor plate using the screws previously removed. Orient the plate approximately as shown in the wiring diagram. Tighten screws, lightly.
- 17) Route the cable out of the slot in the engine case and over to the electronic module. The grommet from the point cable may be used by slitting it with a razor blade to remove it.
- 18) Connect the three plugs to the receptacles, matching the red, white and black wires.
- 19) Plug the remaining blue and yellow wires into the receptacles where the points connected. The blue wire goes with the blue/yellow and the yellow goes with the yellow with green tubing.
- 20) This completes the wiring. Make sure that all connections are secure and that all colors match.

TIMING -

NOTE:

- A) The left sensor triggers cylinders 3-4, and provides +/- 10° of adjustment. The right sensor triggers cylinders 1-2, and should remain fixed. 1-2 timing is adjusted by rotating the plate. Clockwise movement advances the timing and counter-clockwise movement retards the timing.
 - B) Ground circuit on back of sensor plate must be in contact with engine in order for ignition to operate.
 - C) The sensor to rotor air gap is not critical as long as there is no contact between the parts. There should generally be .020 inch between them.
- 1) To time the engine statically, connect a 12 volt test light from the junction of the yellow coil wire to ground (engine case). Do not disconnect the wires. Remove the timing mark hole cap.
 - 2) Turn ignition switch on. Slowly rotate engine in the forward direction using the 12 mm generator bolt (see owners manual under timing) until the test light turns on. The F1 timing mark should align with the index mark on the engine case.
 - 3) If the marks do not align, loosen the sensor plate screws and rotate the sensor plate clockwise or counterclockwise as appropriate (.010 of movement approximates 1°) and retighten screws.

NOTE: If light remains bright at all times, it indicates that there is a bad connection in the wiring. Ensure that there is 12 volts to the red module wire.

- 4) Rotate the engine backward until the light goes out, and repeat Steps 2 and 3 until 1-2 timing is correct.
- 5) After 1-2 timing is verified, connect the test light to the blue coil wire. Repeat Steps 2, 3, and 4 using the F2 timing mark for cylinders 3-4. If 3-4 timing adjustment is required in Step 3, loosen the nuts on the left sensor and move it clockwise or counterclockwise as appropriate and retighten nuts.
- 6) The engine can also be timed with a strobe light using the advance marks and an engine speed of about 2500 RPM (full advance).
- 7) After timing, replace the covers previously removed.

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