



**Ignition Module
Instruction Manual
Part#: 605, 609**



IGNITION MODULE PN 605 and PN 609

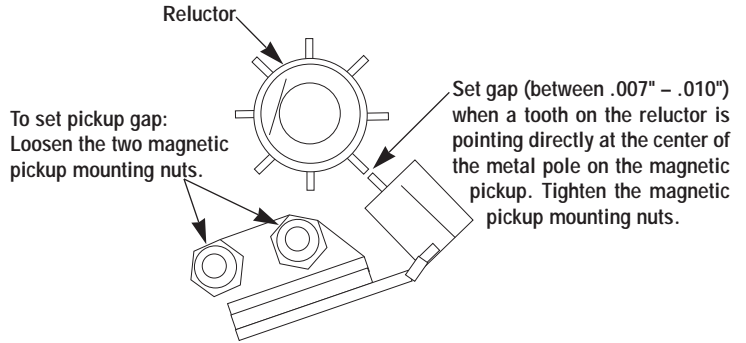
INSTALLATION AND ELECTRICAL WIRING PROCEDURE

PN 605/UNILITE® MODULE: Apply a thin coat of silicone grease to the bottom of the module before mounting the module to its plate in the distributor.

PN 609 and PN 605: Slide the three wires from the MODULE, through the grommet, to outside the distributor housing. Put the three wires from the MODULE in the TERMINAL PIN HOUSING: GREEN WIRE in hole #1, BROWN WIRE in hole #2, RED WIRE in hole #3. Plug the three wire harness (PN 29349, not supplied with this kit) into the TERMINAL PIN HOUSING.

WARNING: Make sure that the vehicle is originally equipped from the factory with an ignition ballast resistor or loom resistance wire from the ignition switch to the coil (+) terminal. If the vehicle is not originally equipped from the factory with an ignition ballast resistor or loom resistance wire, a Mallory ballast resistor, PN 700, must be installed in series on the wire from the ignition switch to the coil (+) terminal. See a service manual for the vehicle for further information. For example, vehicles equipped with Ford TFI, or Delco HEI ignition require the installation of a Mallory ballast resistor, PN 700. Failure to use a resistor will result in the eventual destruction of the module.

A .0075" polyester gauge is provided to assist in setting the pickup gap.



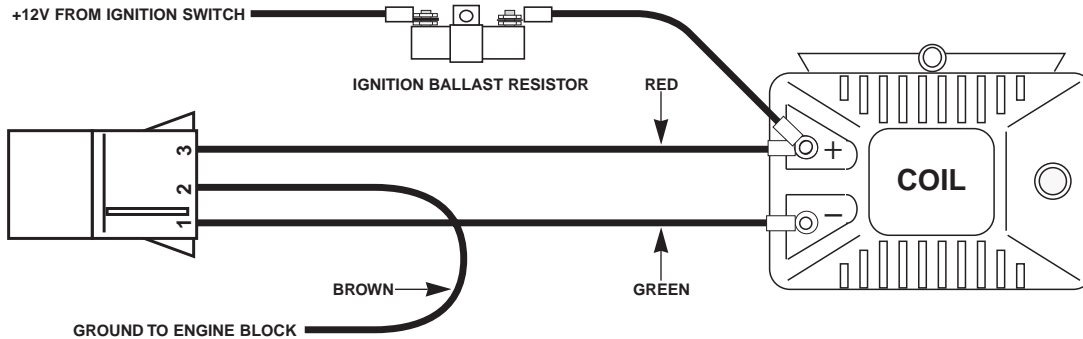
Connect the three wires as follows:

If a HYFIRE® or other aftermarket ignition control is being used, connect the MODULE according to the instructions supplied with the HYFIRE® or aftermarket ignition control.

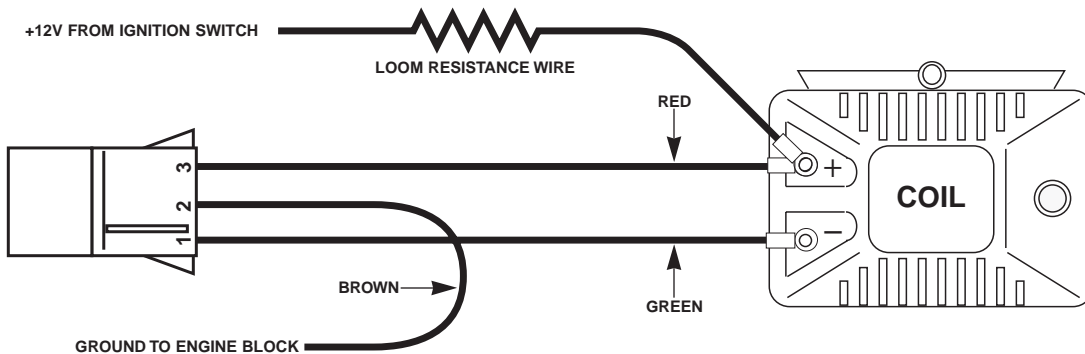
RED WIRE: Power/voltage for the MODULE. Connect to coil (+) terminal.

GREEN WIRE: Ignition trigger. Connect to coil (-) terminal.

BROWN WIRE: Ground for the MODULE. Connect to ENGINE BLOCK GROUND. Clean away any grease, oil, and paint from the mounting surface before the connection is made.



NOTE—
If your vehicle is difficult to start, remove the red wire from the plus (+) side of the ignition coil and connect it to the ignition switch side of the ballast resistor.



NOTE—
When using a HYFIRE® or other aftermarket ignition control, connect the MODULE according to the instructions supplied with the HYFIRE® or aftermarket ignition control.



UNILITE® TEST PROCEDURE

NOTE: IF YOU ARE USING A CD IGNITION BOX, YOU MUST BYPASS IT BEFORE PERFORMING THIS TEST!

- 1) Remove the cap and rotor. Turn the ignition ON and test voltage at the NEGATIVE side of the coil (black lead of meter to ground and red lead of meter to coil NEGATIVE post). Voltage should read 12 volts.
- 2) If battery voltage is present, place a credit card, driver's license, business card or similar and block the photo optics of the module. The voltage should drop to 2 volts or less (1 to 2 volts). If this test is positive, then the module is working.
- 3) If the test results are as follows:
 - a) Voltage does not drop, module is open and must be replaced. This may have been caused by a power surge, high resistance in the plugs or plug wires, or improper ground. Possible charging system load dump.
 - b) Voltage always stays below 2.0 volts. The module has been spiked by high voltage or amperage, lack of ballast resistor, or improperly wired.
 - c) Voltage only drops to 3-4 volts could produce a weak spark.

Possible causes are:

- Faulty charging system (stuck or shorted regulator/alternator)
- Faulty starting system (starter drag)
- Non-suppression spark plug wires (copper or stainless core wires). Spark plug wires must be carbon core or spiral wound plug wires.
- Large amperage alternator
- High amp stereo equipment
- CB radio
- Direct shorts in the ignition or electrical system
- Trying to start motor with battery charger hooked up
- Welding on the vehicle with the distributor hooked up (disconnect 3-wire plug of the distributor before welding)
- Faulty or improper ground of module

If you must replace the module, replace it with Mallory Part No. 605.

If after completing the test and you are not sure of the results, 216-688-8300 EXT 5

FIGURE 1



FIGURE 2





MAGNETIC BREAKERLESS TEST PROCEDURE

NOTE: IF YOU ARE USING A CD IGNITION BOX, YOU MUST BYPASS IT BEFORE PERFORMING THIS TEST!

- (1) Remove cap and rotor. Turn ignition ON and take a voltage reading at the POSITIVE (+) side of the coil (black lead to GROUND and red lead to coil POSITIVE + post). The voltage should read about 6 volts.
- (2) Line up reluctor and pick-up as shown in Figure 1. If battery voltage is present, take a flat blade screw driver and short between the pick-up and reluctor blade (Figure 2). The voltage should go up to 12 volts momentarily and then go back down to battery voltage. If it does, then the module is good.
- (3) If the test results are as follows:
 - (a) Voltage does not go up, module is bad and must be replaced. May have been caused by power surge, high resistance in the plugs or plug wires, or improper ground. Possible charging system load dump.
 - (b) Voltage always stays below 6 volts. Module has been spiked by high voltage or amperage, lack of ballast resistor, or improperly wired up. Possible causes are:
 - (1) Faulty charging system (stuck or shorted regulator/alternator)
 - (2) Faulty starting system (starter drag)
 - (3) Non suppression spark plug wires (copper or stainless core wires). Need to be carbon core or spiral wound plug wires.
 - (4) Large amperage alternator
 - (5) High amp stereo equipment
 - (6) CB Radio
 - (7) Direct shorts in the ignition or electrical system
 - (8) Trying to start motor with a battery charger hooked up
 - (9) Welding on the vehicle with the distributor hooked up (disconnect 3-wire plug of the distributor before welding)
 - (10) Faulty or improper grounding of module

If you must replace the module, PartNo.609

FIGURE 1

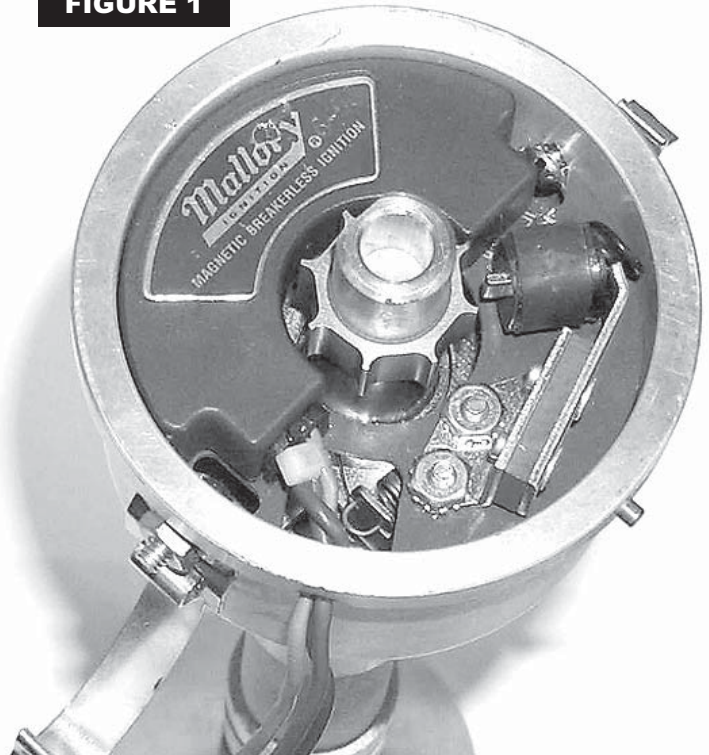


FIGURE 2

