ACCEL POINTS ELIMINATOR CONVERSION
PART NO. 2010

INSTALLATION INSTRUCTIONS

IMPORTANT: Before installing the ACCEL Points Eliminator Ignition System, make sure that your vehicle is equipped with an ignition ballast resistor (or loyal resistance wire) in the wire between the ignition switch and the coil (-) terminal. One easy way to test the ignition ballast resistor is to check the service manual for your vehicle. You can also test your stock ignition system voltage while the engine is at idle at the coil (-) terminal. If the measured voltage is within 1 volt of battery voltage, an ignition ballast resistor must be installed in the wire from the ignition switch. In general, all vehicles equipped with the Delco point ignition were equipped with an ignition ballast resistor. If you find your vehicle is not equipped with an ignition ballast resistor, install an ACCEL Ignition Ballast Resistor Part No. 150001 in series in the wire from the ignition switch. Failure to use an ignition ballast resistor will result in the eventual destruction of the ACCEL Points Eliminator Ignition Module.

Exceptions: All using one of ACCEL’s 2 specially matched coils eliminate the need for a ballast resistor or a resistance wire. These coils are: 140108, 8140 or 8140C SuperStock Canister Coils, or 140099 HD-8 core SuperCul. If your vehicle is equipped with an ACCEL 275+/300+ Electronic Ignition Control or similar aftermarket ignition control, use the wiring specifications for the particular controller, along with its matching coil, such as ACCEL’s 140019 SuperCoil.

NOTE: This kit can be installed in the distributor without removing the distributor from the engine if the distributor is easily accessible. However, removal of the distributor from the engine is recommended.

PARTS INCLUDED IN THIS KIT
1 ACCEL Points Eliminator Module
2 Double Wheel, 2-piece set
3 Distributor Wire Harness
4 Female Connector
5 Mounting Plate
6 Capsule, Thermal Conductive Grease
7 Cable Tie
8 Button, 6-32 x 3/4 Hex
9 Nuts, 8-32 Hex
10 Flathead Screws, 8-32 x 1/4
11 Screws, 6-32 x 3/16
12 Grommet

GENERAL INFORMATION

Ignition Coils:
The ACCEL Points Eliminator Ignition System is designed to work with most stock ignition coils and alternative high performance ignition coils. For optimum performance in systems without an ACCEL, 275+/300+ or similar ignition control, use one of ACCEL’s 2 specially matched coils eliminates the need for a ballast resistor or a resistance wire. These coils are: 140108, 8140 or 8140C SuperStock Canister Coils, or 140099 HD-8 core SuperCul.

Spark Plug Wires:
To prevent false triggering and the possibility of premature ignition failure, use compression type spark plug wires. We recommend spiral core ignition wires, such as ACCEL 8mm Spiral Core SuperCul, ACCEL 8mm Spiral Core, ACCEL 8+ mm RaceWires or ACCEL 8mm Elite 9000 ignition Wire. Do NOT use a copper core spark plug wire set with the ACCEL Points Eliminator kit.

Spark Plug Gaps:
For street applications, use your engine manufacturer’s specifications. For racing applications, experiment with your engine manufacturer’s specifications, then experiment with a slightly greater gap to achieve maximum performance.

Electric Welding:
Welding the distributor wire harness while welding on the vehicle is not recommended. Optional Circuit Guard Mallory Part No. 29371: Unplug the distributor wire harness before welding on the vehicle. Voltage spikes are clamped and regulated by the optional Mallory Circuit Guard from voltage regulator, corroded or oxidized electrical connections and similar electrical problems. Voltage spikes damage the ACCEL Points Eliminator Ignition Module. Voltage spikes are clamped and regulated by the optional Mallory Circuit Guard from damage the ACCEL Points Eliminator Ignition Module.

INSTALLATION PROCEDURE

Step 1
Disconnect the point trigger wire from the coil (-) terminal.

Step 2
Locate the spark plug wire on the distributor cap that the engine timing is set from. See a service manual for these locations. Mark the distributor housing, in line with this spark plug wire, in position on the distributor cap.

Step 3
Turn the engine crankshaft until the timing mark lines up with the TDC (top dead center) mark on the timing tab. See a service manual for these locations.

NOTE: Removing the spark plug may make it easier to turn the crankshaft.

Step 4
Remove the distributor cap from the distributor and lay it aside. Do not remove the spark plug wires or coil wires. The rotor should point to the mark made on the distributor housing from Step 2. If it is not, turn the engine crankshaft full turn (360°) until the timing mark lines up (again) with the TDC mark on the timing tab.

NOTE: Once you are finished with Step 4, DO NOT turn the crankshaft until the distributor is installed - Step 12.

Step 5
Note the direction the rotor is pointing. Note the direction the vacuum chamber is pointing. Disconnect the vacuum chamber hose at the carburetor and temporarily plug the carburetor fitting. Remove the distributor hold down clamp and remove the distributor from the engine.

Step 6
Remove the rotor. Disconnect the primary point wire. Remove the primary wire and ground from the distributor. Remove the points and the condenser from the breaker plate.

Step 7 (See Figure 1)
Install the mounting plate flat against the breaker plate where the points were. Secure using two 8-32 x 3/4 flathead screws.

NOTE: Occasionally, the breaker plate ground wire will interfere. Pry the breaker plate ground wire from the breaker plate, and disconnect it from vacuum chamber mounting screw. The ACCEL Points Eliminator system will operate without the breaker plate ground wire.

Step 8
Apply a thin coat of white thermal conductive grease to the bottom of the ACCEL Points Eliminator module. Install the ACCEL Points Eliminator module onto the mounting plate with two 8-32 x 1/4 screws. See Figure 1. Secure the three module wires to the breaker plate with a cable tie.

Step 9
Install the grommet in the hole in the distributor housing where the primary point wire had previously led through. Slide the three wires from the ACCEL Points Eliminator module through the grommet, to outside the distributor housing.

Step 10 (See Figure 2)
Put the three wires from the ACCEL Points Eliminator module in the female connector from (green wire is hole A); brown wire is hole A1; and white wire is hole B. Plug the distributor wire harness into the female connector. See Figure 2.

Step 11
Install the two-piece shutter under the rotor drive plate and install two 8-32 bolts. The heads of the 8-32 bolts fit into the mating holes on the underside of the shutter wheel. Install the rotor on the rotor drive and install 6-32 hex nuts. See Figure 1.

NOTE: Some distributors use a rotor made from a flexible plastic. File or cut the rotor locator (on the bottom of the rotor) so that it measures 1/8" in length. Install rotor and shutter as described in Step 12.

Step 12
Install the distributor with the rotor and vacuum chamber pointing in the direction as noted in Step 5. The rotor must be pointing (approximately) at the mark on the distributor housing from Step 2.

NOTE: The distributor must be fully seated into the engine. It may be necessary to turn the oil pump drive, or turn the engine crankshaft two full turns until the timing mark shows (again) with the TDC mark on the timing tab, to allow the distributor to seat fully.

Step 13
Turn the distributor housing until the marked dot on the shutter wheel is approximately in the center of the optics of the ACCEL Points Eliminator module. This will generally give timing close enough for starting purposes. The rotor must be pointing approximately at the mark on the distributor housing from Step 2. Put the distributor hold down clamp in place and tighten lightly, leaving it loose enough to turn the distributor.

Step 14
Install the distributor cap.

WORKING PROCEDURE (See Figures 3, 4 and 5)

Step 1
Make sure that your vehicle is equipped with an ignition ballast resistor (or loyal resistance wire) in the wire between the ignition switch and the coil (-) terminal. If you find your vehicle is not equipped with an ignition ballast/resistor system, install an ACCEL Ignition Ballast Resistor Part No. 150001 in series in the wire from the ignition switch. For optimum performance in systems without an ACCEL, 275+/300+ or similar ignition control, use one of ACCEL’s 2 specially matched coils which eliminates the need for a ballast resistor or a resistance wire. These coils are: 140108, 8140, 8140C SuperStock Canister Coils, 140099 HD-8 core SuperCul.

Step 2
There are three wires coming from the distributor wire harness:

RED WIRE: Connect to the coil (-) terminal.
GREEN WIRE: Connect to the coil (+) terminal.
WHITE WIRE: Connect to engine dock ground.

Clean away any grease, oil and paint from the mounting surface before the connection is made.

NOTE: If an ACCEL 275+/300+ Electronic Ignition Control or any other aftermarket ignition control is being used, connect the distributor wire harness according to the instructions supplied with the ignition control.
STARTING THE ENGINE

CAUTION: Be sure all tools, wires and miscellaneous objects are clear of moving engine parts and extreme heat before starting the engine.

Recheck all wires and connections to make sure they are correct. Check and clean, or replace spark plugs. If replacing spark plugs, use types recommended by the engine manufacturer.

Step 1
Connect a timing light. Find the area with the best view of the timing marks.

FIGURE 1

ACCEL POINTS ELIMINATOR WIRING DIAGRAM USING 12V IGNITION FEED AND AN ACCEL 140108, 8140 OR 8140C

Step 2
Start engine. If it fails to start, rotate the distributor in small increments clockwise or counterclockwise until engine starts. Do not exceed more than ten degrees of distributor housing rotation in either direction.

Step 3
Set timing as recommended by engine manufacturer, then tighten distributor hold down clamp. Make sure timing is still correct. If timing has moved, repeat this procedure.

Step 4
Re-connect the vacuum hose between the vacuum chamber and the carburetor.

FIGURE 2

FIGURE 3

FIGURE 4

FIGURE 5