

Mallory Unlite® Breakerless Electronic Conversion Kit For Delco 8-Cylinder Distributors PN 501

- **Parts Included:**
- 1 Unilite Module
- 1 Rotor/Shutter Wheel Assembly, PN 338
- 1 –Distributor Wire Harness
- 1 Female Connector
- 1 Ground Wire
- **Note:** It is recommended to remove the distributor from the engine to install the Unilite Conversion Kit. However, if it is easily accessible, the kit may be installed without removing the distributor.
- **IMPORTANT:** Before starting the installation of the Unilite Conversion, make sure that the vehicle wiring is equipped with an ignition ballast resistor or loom resistance wire between the ignition switch and the coil positive (+) terminal. Reviewing the wiring schematic from the vehicle's Service Manual is the best way to confirm however if it is not available you can check with a volt meter.

Checking for an Ignition Ballast Resistor: With the engine running at an idle, compare the voltage at the coil + terminal with that of the battery itself. If the coil voltage is within 1-volt of the battery's, then a ballast resistor is required before installing the Unilte Conversion Kit. MSD offers a resistor that can be installed inline on the coil + wiring terminal. Failure to install the ballast resistor will result in failure of the Unilte module.

INSTALLATION

- 1. Note the location of the number one spark plug wire on the distributor cap. Mark the cap and the distributor to indicate the number one terminal location.
- 2. Mark each plug wire before removal, and remove the distributor cap.
- 3. Rotate the engine in the direction of rotation until the rotor is aligned and pointing to the number one cylinder location. Note the timing indicator and balancer which should correspond at Top Dead Center (TDC).

- 1 Lower Mounting Plate
- 1 Silicone Grease
- 1 Grommet
- **Retaining Screws**



Figure 1 Unilite Conversion Installation.

- 4. If you are removing the distributor, disconnect the vacuum hose and coil wiring. Loosen and remove the distributor clamp, then lift the distributor out of the engine. Note that the rotor will turn as you lift the distributor out due to the helically cut distributor gear.
- 5. Remove the rotor, coil wiring and grommet along with the breaker points and condenser.
- 6. Install the Unilite mounting plate in place of the original breaker points. In some applications the circuit breaker ground wire may interfere. If that's the case, remove the ground wire and install the supplied ground wire between the condenser mounting screw and the vacuum advance mounting screw.

- 7. Install the Unilite module onto the mounting plate using the supplied screws. Push the twires through the hole in the bottom of the distributor bowl and slide the new rubber grommet over the wires and into the hole. There is also a plastic wire support that helps secure the wires on some applications. Be sure the wires are routed away from the spinning shaft and rotor assembly.
- 8. The two piece shutter wheel installs as follows:
 - A. Locate one part of the shutter wheel under the rotor drive plate opposite the electronic module. Rotate this part between optic posts on the module.
 - B. Locate the other half of the shutter wheel under the rotor drive plate and line it up with the first half.
 - C. Assemble the two halves through the rotor plate and rotor with the supplied 8-32 hex machine screws and nuts. Ensure the head of the screw is recessed into the shutter assembly.

Note: Some late model Delco distributors using a light colored factory rotor may require to shorten the rotor locating stud. If this occurs, simply file the locating stud down to approximately 1/8".

- 9. If the distributor was removed, prepare it for installation again. Lower the distributor into the engine making sure the rotor comes to rest at the same position as it was removed. Also ensure that the housing is seated all the way down before installing the distributor clamp. DO NOT FORCE!
- There are three wires from the Unilite that need to be connected: RED – Connects to the Ballast Resister (Figure 2). GREEN – Connect to the coil negative (-) terminal BROWN – Connect to a solid, clean engine ground.
 Reinstall the distributor can and wires making sure the number
- 11. Reinstall the distributor cap and wires making sure the number one wire is positioned on the number one terminal aligned with the rotor tip. Install the remaining wires.
- 12. Start the engine and confirm oil pressure. If the distributor was removed you will need to check and adjust the ignition timing.



Limited Warranty

MSD warrants this product to be free from defects in material and workmanship under its intended normal use*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

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*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD. Any modifications to this item or if it is used on an application other than what MSD markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD will accept no liability for custom applications.

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