

Wheels: Why does moisture affect the ignition system?

Halderman: Moisture on spark plug wires increases the capacitive resistance. What this means is that a higher voltage is needed to cause an arc to be created at the spark plug. Many vehicle manufacturers use rubber coverings over the distributor cap to help prevent the moisture from affecting engine performance. Because moisture on the ignition components can effectively reduce the spark energy to the spark plugs, it is very important that the spark plugs have the specified gap. As a spark plug wears, the gap between the center electrode and the side electrode increases. When this gap increases, it requires a higher voltage to arc across the gap. Also, for best results, use factory ignition parts or those from a well known national company.

When many professional service technicians see low cost aftermarket parts have been installed, such as ignition components, and there is still a problem, they immediately replace them with original equipment or good equipment quality parts. In most cases, the problem is solved. Aftermarket parts are not required to be tested for durability like original equipment parts and that is one reason for the cost difference.

