No. NGKSP-0617-5

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## **Topic**

High Performance Air Filters

## Issue

Performance Air Filters can allow up to 35% more air flow, will result in a lean condition. The ECM/PCM will compensate by increasing the amount of fuel thereby reducing fuel mileage. This, combined with 5% to 10% Ethanol-blended fuel will alter the calibration specifications from the factory settings and create a lean condition whereas the ECM/PCM cannot adjust the fuel injected sufficiently to satisfy the needs of your engine. This will result in poor fuel mileage and require the use of a higher octane fuel to restore the desired power to your vehicle. In addition, Spark Plug Platinum tabs may separate due to extreme lean conditions.

## **Solution**

The following adjustments may be performed to restore the expected mileage and performance from the use of the performance air filter and fuel type. NGK Spark Plugs Canada Limited recommends:

- Install a spark plug one heat range cooler than OE to dissipate the increase in cylinder temperature
- Adjust the spark plug gap 0.010" smaller than the vehicle's factory setting (Note: do not reduce gap less than 0.035").

## **Additional Information**

The following conditions may require 2 heat ratings cooler:

- Modified engines
- Abnormal driving habits
- Heavy loads
- Towing applications

Smaller gap settings may also be required.

Please contact NGK Technical Services for more information regarding unusual application requirements

1-877-2-SPARKY or info@ngksparkplugs.ca

**Note:** NGK Spark Plugs is the only spark plug company to offer colder than OE heat range spark plugs with resistors and iridium center electrodes.

