

**SUBJECT****N18: MINI Fuel Additive****MODEL**

R55 (Cooper S Clubman and JCW Clubman)

R56 (Cooper S and JCW Hardtop)

R57 (Cooper S Convertible and JCW Convertible)

R58 (Cooper S Coupe and JCW Coupe)

R59 Cooper S Roadster and JCW Roadster)

R60 (Cooper S Countryman and JCW Countryman)

R61 (Cooper S Paceman and JCW Paceman)

With the N18 engine

**SITUATION**

Recent field experiences have shown an increase in various drivability complaints due to excessive carbon deposits in engines' intake valves and fuel injectors.

The overall increase in carbon deposit accumulation is generally attributed to poor gasoline quality; specifically, fuel contamination and a low level of cleaning additives.

**TECHNICAL BACKGROUND**

Combustion chamber/intake valve/injector deposit formation is a by-product of the gasoline burning process. Fuel injector and intake valve deposits may become less troublesome with the Top Tier Detergent Gasoline deposit control standards, which exceed the detergent requirements imposed by the EPA in 1995.

However, vehicles that do not exclusively use a Top Tier Detergent Gasoline, or are regularly driven under severe conditions such as stop-and-go traffic, high ambient temperatures and high altitude, can experience performance problems caused by intake system deposits.

The most common customer complaints may include the following:

**FUEL INJECTORS**

Deposits at the injector's tip can impact fuel flow, upsetting the air/fuel mixture ratio.

**Symptoms:**

- Hesitation or stumble during acceleration or even loss of power
- Poor fuel efficiency
- Increased emissions
- "Service Engine Soon" lamp illumination due to intermittent misfire faults or lean mixture adaptation values

**INTAKE VALVES:**

Carbon buildup may disturb mixture flow at low throttle conditions/idle speeds.

**Symptoms:**

- Poor drivability
- Loss of power
- Unstable/rough idle
- Increased emissions
- “Service Engine Soon” lamp illumination due to intermittent misfire faults

**RECOMMENDATION**

MINI recommends using **TOP TIER Detergent Gasoline** with a minimum octane rating of AKI 91 and with an alcohol content of less than 10% by volume (or any other oxygenates with up to 2.8% of oxygen by weight).

**Moreover, to prevent formation of carbon deposits on the intake valves and injectors, we recommend that MINI Fuel Additive (P/N 83 19 2 350 552) be added to the gas tank.**

**Please inform MINI customers that to achieve optimum cleaning and deposit control, they should add two 100 ml bottles after each engine oil change and then one bottle regularly after each refueling.**

Regular use of MINI Fuel Additive can help address the carbon deposit-related symptoms listed above. By removing these deposits, an engine may experience restored power, performance and fuel efficiency; smoother idle running; lower emissions; and reduced octane requirement.

**Note: MINI Fuel Additive is the only MINI approved N18 in-tank additive. Using non-approved fluids or tools can lead to premature component failure, and will not be covered under Warranty.**

**PARTS INFORMATION**

<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
83 19 2 350 552	MINI Fuel Additive, 100 ml bottle	1

**WARRANTY INFORMATION**

Because carbon deposit buildup is related to fuel quality, it is not considered a defect in the vehicle’s materials or workmanship.

Consequently, the use of MINI Fuel Additive as outlined in this bulletin is not covered under the terms of the MINI New Passenger Car Limited Warranty, MINI Maintenance Program, any applicable Federal, State or MINI Emissions Warranty or the MINI Next Certified Pre-Owned Limited Warranty.

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