

# Tips & Technology

## For Bosch Partners

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**BOSCH**

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## Gasoline injection

### **E10 and suitable fuel filters**

#### **E10**

The European Union has resolved to reduce overall CO<sub>2</sub> emissions by 20% by the year 2020. In order to achieve this, the maximum permitted value of ethanol in gasoline fuels has been increased to 10%.

So, E10 is a gasoline containing up to 10% bio-ethanol. This percentage was previously limited to max. 5% (E5 fuel).

#### **Effects of E10**

E10 fuel can lead to problems in the vehicle due to the higher proportion of water in ethanol:

- Aggressive behavior against certain elastomers and sealing materials: leaks due to porous lines and cables in the fuel system
- Corrosion of aluminum parts of the fuel and injection system
- "Saponification" of the fuel through reactions with certain materials: silting up of injection nozzles

Around 90% of all gasoline passenger cars can run on E10. As for the remaining 10% of all cars, even just one tank of E10 fuel can result in damage. Therefore, before using this fuel, all car drivers are requested to find out – from their auto repair shop, for example – whether their vehicle is suitable for fuelling with E10.

#### **Use of fuel filters with E10**

Bosch fuel filters can cope with the additional requirements posed by bio fuels in most cases and, in accordance with the current state of the art, ensure optimum protection and constant high engine performance throughout their service life.



The list below indicates which Bosch fuel filters can be used without hesitation for E10:

			
0450902151	Fiat	0450905906	Audi, VW
0450902160	Fiat, Dacia, Lancia	0450905907	Porsche
0450902161	Citroen, Hyundai, Renault	0450905908	Volvo
0450902162	Suzuki	0450905909	Honda
0450902164	Nissan	0450905911	Bogdan
0450904005	BOMAG, Farymann Diesel	0450905912	Hyundai, Toyota
0450904058	Citroen, Fiat, Ford, Peugeot	0450905914	Toyota
0450904059	Alfa Romeo, Ford, Fiat, Opel	0450905915	Hyundai
0450904060	Mercedes-Benz	0450905916	Honda
0450904077	Mercedes-Benz	0450905920	Chevrolet
0450904149	Audi, VW	0450905921	Volvo
0450904150	Audi, Ford, VW	0450905926	Ford
0450904158	Toyota	0450905927	Ford
0450904159	Renault, Skoda	0450905939	Ford, Volvo
0450904159	Renault, Skoda	0450905942	BMW
0450904162	Peugeot	0450905950	BMW
0450904163	Mercedes-Benz	0450905951	Toyota
0450905002	Alfa Romeo, Audi, BMW, Fiat	0450905952	BMW
0450905003	Audi, VW	0450905953	Mitsubishi
0450905005	Alfa Romeo, Fiat	0450905954	Suzuki
0450905007	Mercedes-Benz	0450905955	Toyota
0450905016	Peugeot	0450905956	Mazda
0450905021	Audi, Citroen, Ferrari, Fiat	0450905957	BMW
0450905025	Audi, VW	0450905958	Hyundai
0450905030	Alfa Romeo, BMW, Citroen, Fiat	0450905959	Audi, Skoda
0450905032	Mercedes-Benz, Fiat, Ford, Volvo	0450905960	BMW
0450905066	Audi, VW	0450905961	BMW
0450905079	Porsche	0450905962	Daihatsu
0450905084	BMW	0450905963	Toyota
0450905087	Alfa Romeo, Ferrari	0450905964	Ford
0450905091	Audi	0450905966	Mazda
0450905095	Fiat, Peugeot	0450905967	Mazda
0450905096	Fiat, Renault, Peugeot	0450905969	Chevrolet
0450905104	Peugeot	0450905970	BMW
0450905133	VW	0450905971	Subaru
0450905143	Audi, VW	0450905972	Mitsubishi
0450905145	Audi, VW	0450905973	BMW
0450905147	Fiat, Ford, Peugeot, Volvo	0450905974	Hyundai
0450905148	Audi, VW	0450905975	Mercedes-Benz
0450905195	Ford	0450905976	Chevrolet
0450905200	Ford, Volvo	0450905977	Daihatsu
0450905201	Citroen	0450905978	Toyota
0450905216	Volvo	0450905979	Opel
0450905231	Alfa Romeo, Ferrari	0450905980	Toyota
0450905267	Alfa Romeo, VW, Ferrari	0450905981	Ford
0450905273	Alfa Romeo, Chevrolet, Fiat	0450905982	Ford
0450905280	Opel, Skoda	0450905983	Mazda
0450905295	Rolls-Royce, Bentley	0450905984	Toyota
0450905320	Alfa Romeo	0450905985	BMW
0450905322	Volvo	0450905986	Chevrolet
0450905323	MAN	0450905987	Toyota
0450905324	Ford	0450905988	Toyota
0450905331	Ford, Volvo	0450905989	Mazda
0450905401	Fiat, Peugeot	0450905990	Toyota
0450905601	Audi, Ferrari, Ford	0986450030	Suzuki
0450905901	BMW	0986450039	Toyota
0450905903	Renault	0986450100	Honda
0450905904	Renault	0986450102	Ford
0450905905	BMW	0986450103	Toyota



0986450104	Honda
0986450105	Ford
0986450106	Ford
0986450107	Toyota
0986450108	Ford
0986450109	Chevrolet, Toyota
0986450110	Toyota
0986450111	Hyundai Toyota
0986450113	Mitsubishi
0986450114	Subaru
0986450115	Toyota
0986450117	Ford, Toyota
0986450119	Chevrolet
0986450123	Toyota
0986450124	Lada
0986450138	Nissan, Toyota
0986450150	Nissan
0986450221	Toyota
0986450222	Nissan
0986450225	Hyundai
0986450604	Toyota
0986450624	Hyundai
F026403000	BMW
F026403001	Toyota
F026403002	BMW
F026403003	Audi
F026403006	Audi, Skoda
F026403008	Audi, VW
F026403009	Ford, Volvo
F026403900	VW, Nissan

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