

# insider info. Winter Edition

## Exhaust Smell During Cold Start

Winter is upon us and the time for cold engine starts has arrived. As we all know, starting a cold engine requires a rich mixture. Starting a cold engine with low vapor pressure fuel requires a very rich mixture. Since low vapor pressure fuels are now very common around the country, the engine control units are programmed to anticipate low vapor pressure fuels and deliver a very rich mixture when starting. This rich mixture may, at times, produce exhaust gasses immediately after the start that have a gassy smell to them. This is normal. The smell is a result of the formulation of the fuel being used and the rich mixture needed to start the vehicle and keep it from stumbling, then stalling during the first few seconds of running.

Some customers may wonder whether this smell indicates a problem or whether anything should be done about it. The question is whether the car started okay. The fact that the vehicle successfully started, didn't stumble, and didn't stall, means the mixture delivered was the mixture required. Any altering of this mixture to eliminate the smell would, therefore, mean that the mixture delivered would not be the mixture required, and would produce hard starting (or no starting!), stumbling or stalling. Since all of these consequences are undesirable, altering the mixture is undesirable also.