

Wheels: An e-mail from a reader in Houston, Texas, states, “I have a 1985 Chevrolet Cavalier station wagon that starts fairly well during warm weather, but when the temperature is below around 50°F, it becomes hard to start. The engine has to be cranked three to six times to get it going in the morning. What is the cause of this hard start on chilly mornings?”

Halderman: The most common cause of the problem you describe is carbon buildup on the intake valves. These deposits absorb fuel when the engine is first started. The solution is to use a top engine cleaner and follow the directions on the container. I recommend the use of General Motors Corp. top engine cleaner available at any local dealer for less than \$10.00. This process includes operating the engine at about 2000 revolutions per minute (fast idle) and slowly pouring the contents of the top engine cleaner down the throttle-body fuel injector. After all of the contents have been poured into the intake, stop the engine and allow it to sit for an hour or more. Then, start the engine and drive the vehicle aggressively to help blow the loosened carbon from the engine. In severe cases such as your vehicle, the treatment may have to be repeated.

Wheels: Isn't decarbonization used to reduce exhaust emissions? This seems like a similar process. What is the difference between decarbonization to cure a cold driveability problem and decarbonization to repair an E-check emission test failure?

Halderman: Decarbonization is used as a repair procedure for excessive exhaust emissions and as a driveability repair. Removing carbon from the combustion chamber and valves, allows the engine to operate more efficiently.

