'Why is My Car Doing This?'

August 16, 2010

Modern technology in today?s automobiles can cause engine rpm to increase slightly without warning, but don?t panic. There?s a reason for this and once you understand why, you won't be surprised when it happens.

Here are a few examples of these common occurrences from the experts at Toyota:

Cold start idle-up: An increase in engine idle speed normally occurs just after a cold start on the first drive of the day. This high idle speed is a normal condition of a cold engine. The engine idle speed will reduce as the engine warms up.

Transmission shift: When accelerating while driving at a slow to moderate speed, the driver may experience a slight pause, as the transmission downshifts to a lower gear, followed by a notable increase in engine rpm as the vehicle accelerates.

Catalytic converter protection: On some manual transmission models, the engine control computer may keep the engine rpm above idle as the driver shifts between fifth and sixth gears at highway speeds. This momentary rpm increase is designed to enhance the life of the catalytic converter.

Air conditioning idle-up: On vehicles with an engine-driven A/C compressor, the engine idle rpm will increase slightly as the compressor cycles on. This is done to reduce the chance of an engine stall condition due to the increased load being place on it by the operation of the A/C compressor.

Power steering idle-up: On vehicles with engine-driven hydraulic power steering, the driver will note a slight increase in engine idle rpm when the steering wheel is turned while stopped or at low speeds. This is a normal operating condition and is done to reduce the chance of an engine stall due the increased load placed on it by the operation of the power steering pump.