

Wheels: Brad L from Massachusetts writes, “I bought a 2002 Chevy Malibu at auction. The battery was dead and after I replaced it, it started right up. I realized the serpentine belt was off and had snapped. I bought a new serpentine belt and put it on, but then it wouldn't start. It sounds like it wants to turn over but it can't. I took the serpentine belt off and it starts up, so I'm guessing one pulley is frozen, maybe the water pump. I usually try the process of elimination, I know what it not, I just don't know what it is. Any suggestions or can you point me in the right direction? I would be very grateful.

Halderman: The most likely fault is a locked-up alternator. This is a common problem because the rear bearing fails and keeps the rotor shaft from turning. There have been several cases where the engine has been changed due the alternator being locked up and it was not discovered until after the replacement that the engine had the same problem.

All of the units and pulleys rotate freely. It is not unusual, for example, for the water pump to become locked up due to ice formed in freezing weather. Maybe the previous owner had a coolant leak and kept adding pure water without antifreeze.

