



TECH TIPS



Five Step Program

Prior to becoming involved in any tune-ups, diagnostic work, smog repairs, or cooling system repairs, I recommend the following initial inspection routine:

1. Check oil and coolant.
2. Note the condition of the CHECK ENGINE lamp and other warning lamps.
3. Check for hydrocarbons at the radiator to rule out the possibility of a head gasket problem. Many water pumps, heater cores, hoses, and radiators fail because of head gasket-related problems. Note: All engines can run for a short period of time at a low coolant level-long enough for you to complete a test for hydrocarbons at the radiator filler neck.

It's a lot easier to tell the customer the heater core started to leak because of a head gasket problem, instead of having to explain after replacement of the heater core that a head gasket replacement is also necessary. Get the whole picture before you give your diagnosis to the customer.

4. Check the condition of the battery and alternator. Note any high or low DC voltage conditions. Pay particular attention to diode problems, which can allow AC voltage into the vehicle's electrical system. AC

voltage can disrupt signals from frequency-type sensors and affect oxygen sensor performance.

5. Test the tailpipe emissions at idle and 2500 RPM. Print a copy of the results for the customer's history file. This record can be useful for documenting before and after repair results.

These five steps normally take less than 10 minutes to complete, but they can save a great deal more time later on. They can also improve your relationship with the customer, as they give ample evidence of your diagnostic skills, while providing an effective means of documenting the needed repairs.

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