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Intermittent Maxima Shift Problem

Here's a possible source of intermittent shift problems on a Nissan Maxima we've noticed at our shop. Over time the internal insulation on the ignition coils apparently starts to thin, and the coils draw more current to generate the spark. The additional current, of course, means a stronger magnetic field, not only around the coil but also around the entire primary harness leading to the secondary from the coils. That can trigger spurious signals in the transmission control wires, leading to shifts at the wrong time. You will wind up with several codes and a blinking trans light. Our fix involves substituting a known-good coil when we find this problem without one of the ordinary solutions. Naturally, if we find one bad coil, we recommend replacement of all of them to the customer.

Scott Reed
Broemmer Automotive Tech
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Preserving the Trim

Many high-end cars use dash trim plates made of wood veneer, and these small pieces can be very expensive to replace if you break one, not to mention the difficulty of getting a color and pattern to match. To avoid that problem, I use small suction cup hangers from the houseware department. The small cups grip the expensive trim pieces that could be easily broken by prying.

Sonny Reeves
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Freeze Plug Stickup

Replacing a freeze plug is more of a problem now since the space you have around the engine block is tighter and more crowded than ever. One trick to make installation easier is to use A/C duct black sticky tape to hold the new plug to the installer, solving at least the problem of the freeze plug that wants to fall off before you even get it to where it belongs.

Be sure to remove all of the old plug from the block cavity since the chunks could otherwise cause a hot spot in the waterjacket.



A third hand in a tight spot could do a lot. If you don't have one, though, sometimes a swatch of black tape can work to hold a freeze plug on the extension when you have to reach in where no human hand can fit.

Hugh R. Todd
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Oops! But Catch It before It Goes!

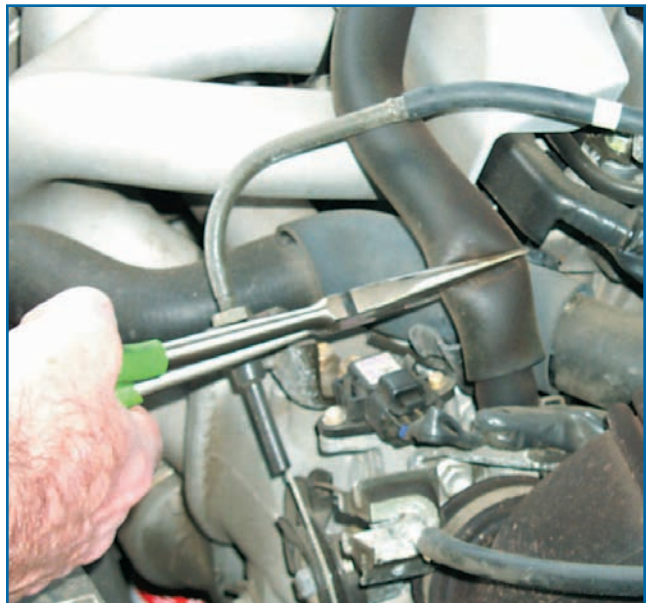
Ever button up a Honda Accord timing belt job on a day full of interruptions, only to find yourself with the nagging doubt that maybe, just maybe, you forgot to tighten the shoulder-bolt on the balance belt tensioner? It's the same kind of feeling you might have if you had just finished overhauling an engine, had it hanging from the hoist to go back into a car and suddenly found a brand-new piston ring on the floor where you'd been working.

Here's what I did for my timing belt anxiety: Loosen both accessory drive belts, then take out the upper bolt on the lower timing belt cover (the one on the firewall side). Take off the lower splash guard, buzz out the crank pulley bolt, the three remaining lower belt cover bolts and the rubber O-ring from the timing belt tensioner nut. Tilt the lower cover out and reach in and tighten the shoulder bolt with a long-handled 10-mm open-end wrench. It took about 20 minutes to re-check my work, not the hour-and-a-half I was worried about.

Todd Schmelz
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PCV Quick-Check

I've seen this problem most often on 1986-89 Honda Accords, but it works on most other cars as well. If the vehicle comes in with what seems like a huge vacuum leak, before you start searching for cracked vacuum lines and spraying oil or propane to chase down a perhaps-imaginary leak, pinch the PCV line closed. If the car instantly runs better, you've solved the problem at a minimum amount of time.



If the idling engine suddenly runs smoothly with the PCV line closed, you know something is wrong with the PCV system. Either the valve is locked open or the hose has gone porous upstream of your pinch.

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