

Auto Service Summary

Shop: Morouffitters

Date: March 10, 2025

Reason For Visit

The vehicle was brought in because the check engine light and the VSC (Vehicle Stability Control) light were illuminated, and the car was running roughly. These are common signs that something is wrong with the engine or the car's stability systems.

Repair Summary

The mechanic performed a thorough system scan and discovered a misfire in cylinder #4 due to rat damage. The wiring to the #4 injector was chewed through, while the sheathing for the #2 injector was also damaged. The technician repaired these issues by replacing the injector pigtails and properly securing the wiring. Furthermore, because the intake plenum was removed for this repair, the mechanic took the opportunity to replace the ignition coils #2 and #6, as well as all three spark plugs on the driver's side. After completing these repairs, the mechanic cleared any error codes and test drove the vehicle to ensure everything was working correctly.

Major

Ignition Coils Replacement:

These were replaced because faulty ignition coils can cause engine misfires, poor performance, and potentially lead to more severe engine damage if left unattended.

Injector Wiring Repair:

The damaged wiring could lead to improper fuel delivery to the engine, causing it to run rough or even fail to start. Timely repair prevents further engine misfires.

Moderate

Spark Plugs Replacement:

New spark plugs were installed, essential for igniting the fuel-air mixture in the engine cylinders. Worn plugs can lead to engine misfires and reduced fuel efficiency.

Intake Plenum Gasket Replacement:

The intake plenum gasket was replaced to maintain a proper seal, which is necessary for optimal engine performance and efficiency.

Minor

No minor repairs.

Cost Breakdown

1. Labor:	\$450.00
2. Fuel Injector Connectors (2 at \$32.10 each):	\$64.20
3. Intake Plenum Gasket:	\$30.32
4. Ignition Coils (2 at \$125.90 each):	\$251.80
5. Spark Plugs (3 at \$16.62 each):	\$49.86
6. Subtotal:	\$846.18
7. Sales Tax:	\$38.63
Total Due:	\$884.81

What Does This Actually Mean?

Ignition Coils:

These components are responsible for taking the battery's low voltage and transforming it into the thousands of volts needed to create a spark in the spark plugs. Without functional ignition coils, your vehicle can have trouble starting or running smoothly, and it may even cause the engine to misfire.

Fuel Injector Connector:

The connector helps provide electrical power to the fuel injectors. The injectors are crucial to delivering the right amount of fuel into the engine. Damaged connections can lead to poor engine performance or even failure to start.

Spark Plugs:

These ignite the air/fuel mixture in the cylinders, and are essential for engine starting and performance. Worn spark plugs can cause engine misfires, poor fuel economy, and difficulty starting the engine.

Intake Plenum Gasket:

This gasket seals the intake plenum, which ensures the engine gets the proper amount of air needed for the combustion process. A leaking gasket can cause rough running conditions due to incorrect air-fuel mixtures.

Other Notes

No additional notes.

Recommendations

Regularly inspect your vehicle for signs of rodent damage, especially if you live in an area with a high rodent population or park your vehicle outside often.

Get routine check-ups to ensure all engine components are in good condition, which helps avoid unexpected failures.

Consider using repellents or deterrents if rat damage to your vehicle becomes a recurring issue.