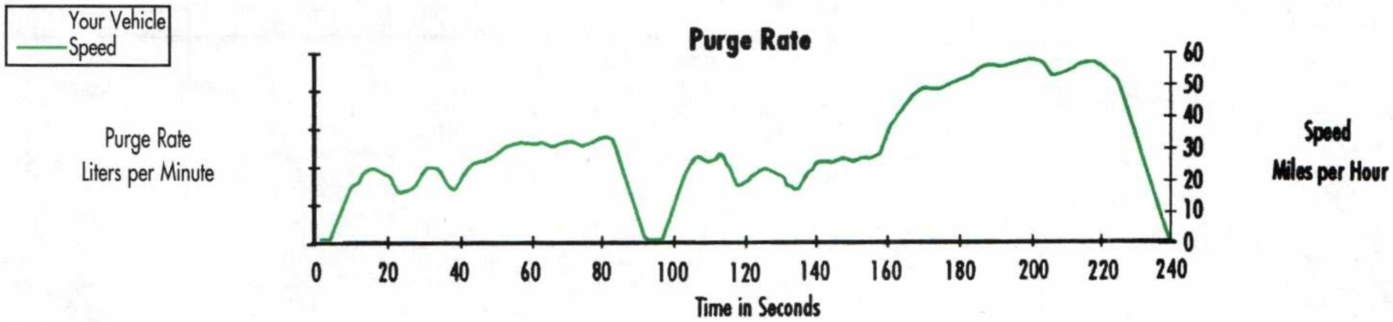
DIAGNOSTIC TRACE REPORT

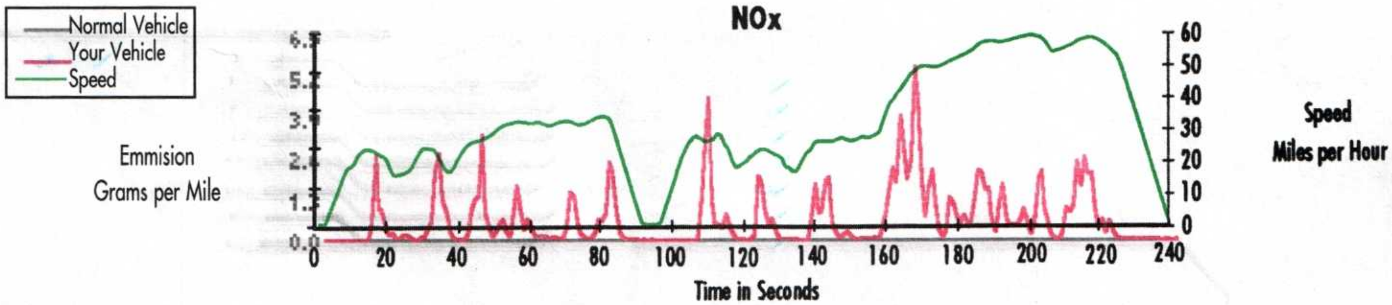
VIN	LANE	STATION	TEST DATE / TIME
2G1FP22G022159784	03	0001	18-FEB-2012 10:57:01

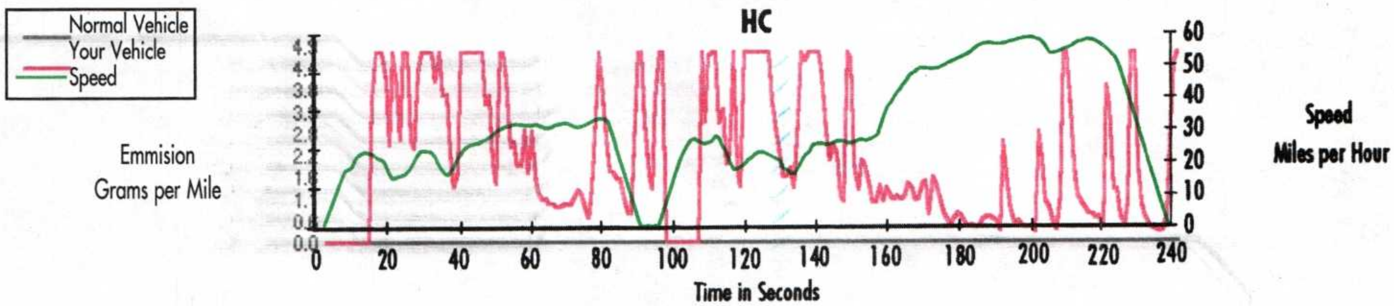
DIAGNOSTIC INFORMATION

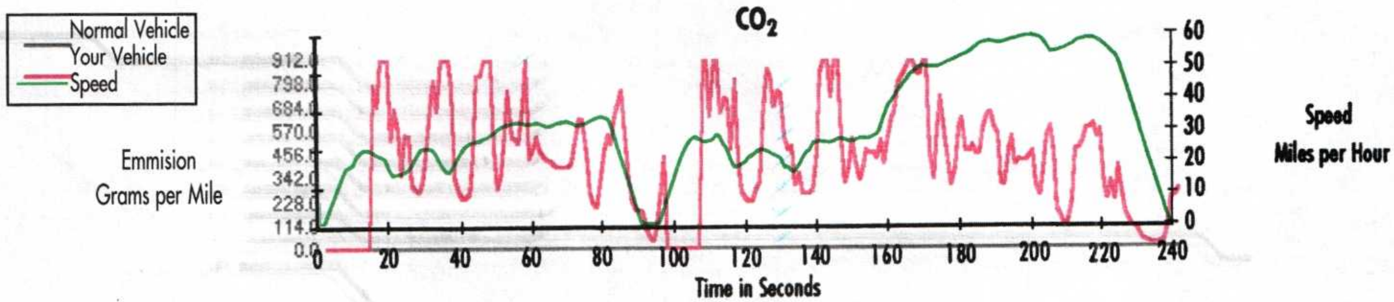
The following information can be interpreted by a trained technician. It is provided for informational purposes only and may not indicate an actual vehicle problem. No repairs should be performed based solely on this information.

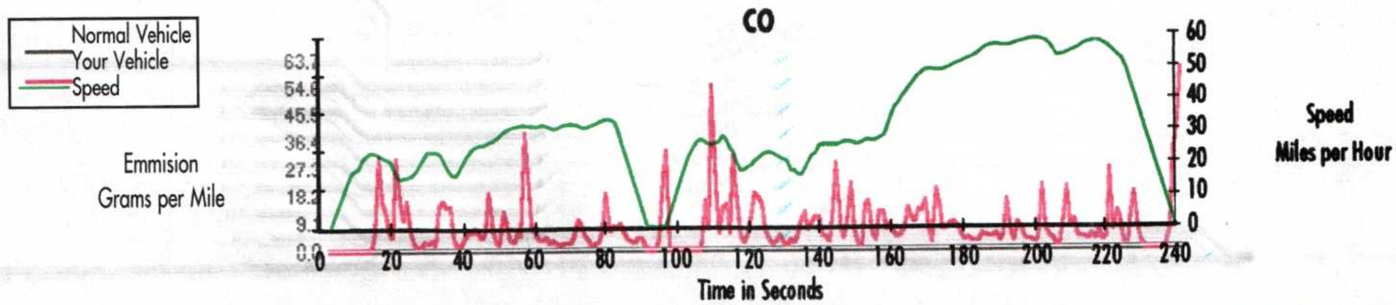
Emissions Comparison to Normal Vehicles of Similar Model:











DIAGNOSTIC SENSOR REPORT

VIN	LANE	STATION	TEST DATE / TIME
2G1FP22G022159784	03	0001	18-FEB-2012 10:57:01

It is intended that the following information be used in conjunction with the "VEHICLE INSPECTION REPORT" for this vehicle.

DIAGNOSTIC INFORMATION

The following information can be interpreted by a trained technician. It is provided for informational purposes only, and may not indicate an actual vehicle problem. No repairs should be performed based solely on this information. This information was obtained by quering your vehicles on board computer (OBD).

SENSOR DESCRIPTION	UNITS	SEC=0092	SEC=0120	SEC=0146	SEC=0160	SEC=0195	SEC=0224
Engine Speed	RPM	1383.75	2060.00	1748.00	2676.00	2908.50	2066.00
Abs Throttle Pos.	%	7.8431	4.7059	3.1373	21.1765	17.6471	0.0000
Calc. Load Value	%	3.1373	9.0196	3.9216	15.2941	14.9020	3.9216
Eng. Coolant Temp.	deg C	93.0000	91.0000	90.0000	90.0000	92.0000	94.0000
Mass. Air Flow Rate	gm/s	18.8400	19.4400	11.7400	53.6900	46.9700	9.2500
Intake Air Temp.	deg C	21.0000	22.0000	22.0000	21.0000	20.0000	19.0000
Vehicle Speed	Km/h	2.0000	36.0000	42.0000	65.0000	92.0000	61.0000
O2S Voltage B1, S1	VDC	0.855000	0.690000	0.855000	0.275000	0.790000	0.000000
O2S STFT B1, S1	%	-3.124	1.563	3.907	0.001	-2.343	0.001
O2S Voltage B1, S2	VDC	0.775000	0.770000	0.800000	0.015000	0.690000	0.005000
O2S Voltage B2, S1	VDC	0.305000	0.790000	0.775000	0.030000	0.080000	0.020000
O2S STFT B2, S1	%	2.344	0.001	-3.906	1.563	2.344	0.001
S.T. Fuel Trim B1	%	0.001	-1.562	5.469	-1.562	-4.687	0.001
L.T. Fuel Trim B1	%	7.032	-4.687	-2.343	-3.906	-2.343	-0.781
S.T. Fuel Trim B2	%	0.001	10.157	4.688	0.001	6.251	0.001
L.T. Fuel Trim B2	%	0.001	-5.468	-4.687	-3.906	-0.781	-7.812

UNDERSTANDING YOUR VEHICLE INSPECTION REPORT

Your vehicle's inspection results are shown on the "VEHICLE INSPECTION REPORT". If the final result is "PASS", proceed with your vehicle's licensing process. If the result is "FAIL", your vehicle must be repaired, retested and either pass a reinspection or qualify for a waiver, before licensing.

The inspection performed on your vehicle determined whether an excessive level of harmful pollutants are being emitted into the atmosphere. The cause of excess emissions may not be exactly identified by the inspection process alone or by personnel at the inspection center. A qualified diagnostic technician should be consulted in order to have the exact cause(s) identified and repaired. The "Repair Facilities" listing will assist you in finding a technician.

GENERAL REQUIREMENTS FOR A WAIVER

If your vehicle has failed two inspections and you have completed repairs associated with the cause of the failure(s), and the expenditure exceeds $715, (amount adjusted annually by the Consumer Price Index), your vehicle may be eligible for a waiver. To apply for a waiver, contact the Department of Revenue at 303.205.5603. Keep in mind that to be eligible, your vehicle <u>must</u> pass a visual inspection of all originally installed emissions control components as well as all claimed repairs and the associated receipts. Vehicles that emit visible smoke will not be eligible for a waiver. All repairs covered under a manufacturer's warranty or recall must be completed before a waiver can be issued.

When applying for a waiver, be certain to bring the following items with you:

1. The vehicle for which a waiver is requested.
2. The <u>completed</u> "Vehicle Repair Form".
3. The "Vehicle Inspection Report Form".
4. All waiver associated repair receipts.

Without these items a waiver cannot be issued.

GENERAL DIAGNOSTIC INFORMATION

This section provides common causes for emissions failures listed on the "VEHICLE INSPECTION REPORT". This information is provided as assistance when repairing a vehicle due to an emissions failure. There are factors not listed here that may effect excess emissions and the repairs necessary to remedy them. This information is provided only to give a starting point in the repair process. These are guidelines only. For further information we suggest you see an automotive technician of your choice.

COMMON CAUSES OF EXCESSIVE EMISSIONS

HIGH HC HYDROCARBONS	• Vacuum leaks • Ignition system malfunction • Faulty computer controls • Air injection system failure	• Incorrect engine timing • Incorrect engine idle speed • Improper fuel injector operation	• Internal engine problem • Incorrect carburetor setting/adjustment • Inoperative/missing catalytic converter
HIGH CO CARBON MONOXIDE	• Air cleaner, choke or carb. malfunction • Fuel injector(s) dirty or sticking • Improper fuel injector operation • Air injection system failure	• Dirty air cleaner, choke or carburetor • Carburetor float level misadjusted • Incorrect carburetor settings/adjustments	• Inoperative/missing catalytic converter • Defective evaporative system • Faulty computer controls
HIGH NOx OXIDES OF NITROGEN	• Vacuum leaks • Incorrect engine timing • Inoperative/missing catalytic converter	• Faulty computer controls • Incorrect carburetor settings/adjustments • Faulty EGR system	• Excessive spark advance • Faulty thermostatic air cleaner system • Engine deposits

COMMON CAUSES OF EMISSIONS COMPONENT FAILURES

The following items must be repaired or replaced to qualify for a waiver.

CATALYTIC CONVERTER	• Missing • Disconnected		• Incorrect style/type • Damaged
FUEL FILLER RESTRICTOR	• Missing • Enlarged past tolerance		• Incorrect style/type • Damaged
OXYGEN SENSOR SYSTEM	• Missing • Oxygen sensor wire(s) disconnected	• Damaged/disconnected feedback components	• Incorrect style/type • Damaged sensor/wires
"CHECK ENGINE" DASH INDICATOR LIGHT	• Light stays on with engine running • Light does not operate as manufactured		• Light comes on during an inspection (Intermittent)
AIS SYSTEM	• Missing • Hoses disconnected	• Incorrect style/type • Damaged	• Pump belt missing • Diverter valve problem

COMMON CAUSES OF RECALL FAILURES

RECALL	• Not having completed repairs for an emissions recall(s) • Not having completed repairs documented with the manufacturer

COMMON CAUSES OF EVAPORATIVE SYSTEMS FAILURES

PURGE	• Vacuum problem • Blocked canister	• Disconnected hoses/lines • Disconnected control valves/solenoids	• Missing/damaged canister • Faulty control valve(s)
PRESSURE	• Leaking fuel tank • Deteriorated leaking hoses/lines • Disconnected hoses/lines	• Disconnected control valves/solenoids • Blocked hoses/lines	• Improper fuel cap seal • Faulty control valve(s)
FUEL CAP	• Missing • Damaged		• Incorrect style/type • Improper fuel cap seal

COMMON CAUSES OF A SMOKE FAILURE

SMOKE	• Internal engine wear	• Excessively rich mixture

COMMON CAUSES OF AN OBD FAILURE

OBD CODES	• There are any fault codes present, when querying the vehicle's on-board computer system • If the OBD connector is missing, damaged or tampered with

COMMON CAUSE OF A CFC FAILURE

This section will not cause a vehicle to fail an emissions inspection. It is advisory only.

CFC's	• When any evidence is detected that the air conditioning system has a leak of it's refrigerant