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Pre-Emission Testing Procedures

Its time to SMOG your vehicle? What should you do to improve your chances of passing?

Below is a list of things that you should do/check prior to heading off to the inspection station.

- Make sure all emissions components are installed. This only applies to states that require a visual inspection of the systems to verify their existence. Muffler, Catalytic converter, EGR Valve, O2 sensor, Check Engine light, Air Box Pre-heater hose.
- Inspect and replace if needed your spark plugs. Make sure the gap is correct, and that you are using the correct type of plug (NGK BPR5ES) (.032in).
- Inspect and replace your Plug wires. Check for cracks, cuts, dry rot, and that they are seated on the plugs and caps tightly.
- Inspect and replace you Rotor and Cap. There should be no excessive carbon build up or oil inside the cap.
- Set timing. Spec calls for 10 degrees BTDC (Before Top Dead Center). To assist in passing SMOG you should set your timing back about 1-2degrees Retarded from normal spec.
- Make sure motor is running within temperature spec. Not running too hot. Make sure your thermostat is working.
- Change Oil and Oil Filter.
- Clean/Change Air Filter
- Does your "Check Engine" or "Service" light come on with the ignition and go off after car is started? If not then you may have an issue.

- Check EGR Valve. Use a Vaccum tester to make sure it holds open. Remove EGR to check the two ports. Left Port (towards firewall) is Exhaust and it blows out. Make sure it is not obstructed. Right port is intake and it sucks when motor is running. You can hold your fingers over the ports while the car is running. If you remove your finger off the right port the car should immediatly die. Moving your finger from the left port you should feel exhaust blowing against it.
- Check all Vaccum lines. Make sure there are no leaks, cracks, or excessive dry rot. Replace as necessary. Also, make sure they are routed correctly.
- Make sure the O2 sensor is installed and the wires have not busted off, or disconnected. Test if you have the ability.
- Check Exhaust system for cracks, leaks, and that it is not rusted through anywhere.
- Some states have started to do gas cap testing. Make sure your gas cap is in good shape and replace if you have any doubts.
- When going to the test station make sure you drive the car long enough to completely warm it up. Do not allow the car to sit idle for too long while waiting for your turn at the station. This can cause the car to heat up.

If you follow the above items you should be well on your way to passing the test. However, if you fail be sure to get a copy of the failure report. This report can be very helpful in diagnosing what the problem is.

If you fail read over Petroworks guide "Diagnosing Emissions Problems".

Petroworks can Supply you with all your tune up needs.