What's The Problem?

EQUIPMENT TEST FAILURES

You must repair or replace any emission control devices that have been removed, defeated, altered or rendered inoperative. Repair or replacement of these devices is not included in the maximum repair costs.

FAILURE:
Catalytic Converter

Required Repair:
Repair connections or replace catalytic converter with new OEM* or approved aftermarket converter which meets U.S. Environmental Protection Agency requirements as indicated on the label and warranty card.

For more information contact the EPA at (202) 564-9240 or epa.gov/otaq/cert/factshts/catcvrts

FAILURE:
Gas Cap

Required Repair:
Repair or replace with new OEM* or comparable aftermarket parts.

FAILURE:
Operational Air Pump System

Required Repair:
Repair or replace with new OEM* or comparable aftermarket parts.

FAILURE:
Positive Crankcase Ventilation System

Required Repair:
Repair or replace valve with new OEM* or comparable aftermarket parts. Replace hoses.

FAILURE:
Evaporative Emissions System

Required Repair:
Repair or replace canister/purge valve or system component with new OEM* or comparable aftermarket parts.

*Original Equipment Manufacture

Assistance for Repair Facilities

To obtain the second-by-second graph that can assist repair technicians in addressing emissions failures in your vehicle, call (877) 692-9227 and provide the operator a fax number for the repair facility where the graph can be sent.

QUESTIONS TO ASK

When You Choose a Repair Shop/Technician

1. Has the repair technician completed emissions training with the Arizona Department of Environmental Quality?
2. Is the repair technician certified by Automotive Service Excellence (ASE) in engine performance (A8) or advanced engine performance (L1)?
3. Does the repair shop/technician use diagnostic instruments?

If the answer to most of these questions is yes, the repair technician will likely be able to repair your vehicle sufficiently to pass the retest.

IMPORTANT INFORMATION

Please Read Carefully

One Time Only Waivers

Vehicles may receive only one repair waiver, at a fee of $15, which is valid for the current vehicle registration. Waiver eligibility requires at least two (2) test failures. Once a waiver has been granted, the vehicle is not eligible for another waiver in future years.

Failing vehicles which have already received a waiver must be repaired and pass inspection before renewing registration in metro Phoenix or Tucson. Vehicles which exceed two times the allowable emissions standard are not eligible for a waiver until the vehicle is repaired sufficiently to reduce the emissions to less than twice the standard. Vehicles that fail due to failure of the catalytic converter are not eligible for a waiver. If your vehicle fails, it may be better to repair the vehicle to pass inspection, rather than to seek a waiver.

State law requires the seller of a vehicle that has received a waiver to tell any potential buyer that the vehicle is not eligible for a waiver in future years.

Emission related repairs made up to 60 days prior to the initial failure may be creditable toward a waiver.

Extended Warranty Coverage

Owners of failing vehicles may be eligible for free emissions-related repairs if their vehicles are still covered by manufacturer’s or extended warranty.

Consult your owner’s manual, your dealer or the EPA Web site at epa.gov/otaq/consumer/warr95fs.txt for information on whether your vehicle has warranty coverage before making necessary repairs.

This test is the result of Federal law. You may wish to contact your representative in the United States Congress. Este documento esta disponible en espanol si se solicita.

What Do I Do Now?

Because your vehicle failed its first inspection, it must be repaired and retested before it can be registered. The repair form on the back of the Vehicle Inspection Report must be completed by a repair technician. Bring the completed and signed form when you return for a retest.

Vehicle registrations expire on the 15th or last day of the registration month. You will not have to pay a late penalty on your registration if all three of the following are true:

1. Your vehicle’s first inspection was completed before the registration expired
2. Your vehicle was repaired, retested and passed inspection
3. The registration renewal is completed and postmarked within 30 days of the first inspection

How Do I Get My Vehicle To Pass Inspection?

Repair requirements and general diagnostic information are provided in this brochure. For more information to assist your repair technician in diagnosing and repairing your vehicle, see the technical advisor in the inspection station office.

How Much Do I Have To Spend On Repairs?

The Maximum Repair Cost Limit (the amount you’re required to spend to repair an emissions failure before applying for a waiver) depends on the age of the vehicle.

MAXIMUM REPAIR COSTS

<table>
<thead>
<tr>
<th>Age of Vehicle</th>
<th>Phoenix</th>
<th>Tucson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960 &amp; Newer</td>
<td>$450</td>
<td>$800</td>
</tr>
<tr>
<td>1975 - 1979</td>
<td>$300</td>
<td>$200</td>
</tr>
<tr>
<td>1974 &amp; Older</td>
<td>$200</td>
<td>$50</td>
</tr>
<tr>
<td>Heavy Duty Diesel</td>
<td>$500</td>
<td>$300</td>
</tr>
</tbody>
</table>

These limits do not apply to equipment failure.
**FAILURES: OBD-II Failures**

- Follow manufacturer’s recommended repairs appropriate for the identified fault code(s).
- Ensure vehicle system monitors are set as ready.

**FAILURES: Evaporative System Failures** *(Maricopa ONLY)*

- **Pressure Test Failures**
  - Check for leaking or disconnected vapor hoses, lines, fuel tank and accessories. Replace or repair as needed.

- **Gas Tank Cap Failures**
  - Check for deterioration or damage to cap or seal surfaces.
  - Replace or repair as needed.

**FAILURES: NOx Failures** *(Maricopa ONLY)*

- Removed, plugged or malfunctioning EGR system:
  - EGR valve
  - EGR exhaust gas ports, lines and passages
  - EGR valve electrical/vacuum control circuitry and component and computer control

- Abnormal engine operating temperature;
- Air management system malfunction;
- Lean air/fuel mixture;
- Catalytic converter efficiency;
- Over-advanced off-idle timing.

**FAILURES: CO (ONLY) Failures**

Check for overfueling due to:
- Canister purge system malfunction
- Carburetor malfunction/adjustment (high float setting leaking power valve; faulty, worn or improper sized needles, seats or jets)
- Throttle body or ported fuel injection system malfunction (fuel injectors, fuel lines, fuel pressure, injection pump, injector timing)
- Engine/Fuel Control System (computer) malfunction (system sensors, actuators, CPU)
- Improper engine coolant mix, improper or malfunctioning engine thermostat

Replace and repair as needed.

**FAILURES: HC or HC and CO Failures**

Check for:
- Ignition system malfunction
- Spark plug malfunction
- Ignition wires (faulty, open, crossed or disconnected)
- Distributor module malfunction
- Distributor component malfunctions (mechanical/vacuum advance, points, condenser, distributor cap, crossfire)
- Catalytic converter efficiency
- Catalytic converter air supply
- Vacuum leak causing lean misfire (intake manifold, carburetor base gasket, EGR, vacuum operated components and vacuum fittings)

Replace and repair as needed.

Under Arizona law, any vehicle failing inspection must be repaired before it is retested and registered. The minimum repairs required for your vehicle are listed below. You must return the Vehicle Inspection Report with the required repair information listed on the back completely filled out by your repair technician when you return for a retest. All repairs must be recorded when you return to qualify for a free retest.

If your vehicle’s engine has severe internal problems, please have your repair technician provide a full description of the problems, how they were diagnosed, and include an estimate for repair costs on the repair facility’s invoice or receipt.

**Emissions Repairs**

For OBD (1996 and newer model years) a diagnostic scanner needs to be available to diagnose the check engine light.

The following instruments or equipment should be available for use on 1967-1995 model years (non OBD): tachometer, timing light or an engine analyzer or oscilloscope, and where specified by the manufacturer, an HC/CO NDIR analyzer to make final air/fuel adjustments.

Final adjustments shall be made only after the vehicle engine is at normal operating temperature. All adjustments must be made to manufacturer’s specifications.

- Perform an emissions failure diagnosis. On computer controlled vehicles, access the on-board-diagnostic and record any trouble codes on the Vehicle Inspection Report under “Technician’s Comments.”
- Inspect for a dirty or plugged air filter and stuck choke, and restricted air intake system. Replace and repair as needed.
- Check dwell (or point gap) and basic timing according to manufacturer’s specifications and adjust as needed (non-OBD).
- Check PCV valve for proper operation. Verify free flow through the PCV system passages and hoses. Repair and replace as needed.
- Check for vacuum leaks at hoses, EGR, vacuum operated components and vacuum fittings.)
- Check for leaking or disconnected vapor hoses, lines, fuel tank and accessories. Replace or repair as needed.
- Check for deterioriation or damage to cap or seal surfaces.
- Replace or repair as needed.
- Removed, plugged or malfunctioning EGR system:
  - EGR valve
  - EGR exhaust gas ports, lines and passages
  - EGR valve electrical/vacuum control circuitry and component and computer control
  - Abnormal engine operating temperature;
  - Air management system malfunction;
  - Lean air/fuel mixture;
  - Catalytic converter efficiency;
  - Over-advanced off-idle timing.

Replace and repair as needed.

**Note:** If vehicle is powered by an alternate fuel (LPG or LNG), follow manufacturer’s recommended adjustment procedures.

**Gas Tank Cap Failures**

Check for:
- Vacuum leak causing lean misfire (intake manifold, carburetor base gasket, EGR, vacuum operated components and vacuum fittings)

Replace and repair as needed.

**Pressure Test Failures**

Check for leaking or disconnected vapor hoses, lines, fuel tank and accessories. Replace or repair as needed.

**Gas Tank Cap Failures**

Check for deterioration or damage to cap or seal surfaces.

Replace or repair as needed.

**Ignition wires (faulty, open, crossed or disconnected)**

- Distributor module malfunction
- Distributor component malfunctions (mechanical/vacuum advance, points, condenser, distributor cap, crossfire)
- Catalytic converter efficiency
- Catalytic converter air supply
- Vacuum leak causing lean misfire (intake manifold, carburetor base gasket, EGR, vacuum operated components and vacuum fittings)

Replace and repair as needed.

**Catalytic converter efficiency**

- Catalytic converter air supply
- Vacuum leak causing lean misfire (intake manifold, carburetor base gasket, EGR, vacuum operated components and vacuum fittings)

Replace and repair as needed.

**Fuel injectors, fuel lines, fuel pressure, injection pump, injector timing**

- Engine/Fuel Control System (computer) malfunction (system sensors, actuators, CPU)
- Improper engine coolant mix, improper or malfunctioning engine thermostat

Replace and repair as needed.

**Throttle body or ported fuel injection system malfunction**

- Fuel injectors, fuel lines, fuel pressure, injection pump, injector timing

Replace and repair as needed.

**Engine/Fuel Control System (computer) malfunction (system sensors, actuators, CPU)**

- Improper engine coolant mix, improper or malfunctioning engine thermostat

Replace and repair as needed.