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# PERMANENT DIAGNOSTIC TROUBLE CODES IMPLEMENTATION PLAN

DEPARTMENT OF CONSUMER AFFAIRS



Bureau of Automotive Repair

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# PERMANENT DIAGNOSTIC TROUBLE CODES (PDTTC)

- Supported by 2010 model years and newer vehicles
- Contain the same Diagnostic Trouble Codes (DTC) as those currently used in Smog Check
- Cannot be erased by a code clear or battery disconnect
- Can only be cleared by the OBD system itself
  - After the vehicle is repaired, and
  - Monitor that triggered the DTC has completed and determined the fault was resolved

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# IMPROVE SMOG CHECK WITH PDTTC - GASOLINE VEHICLES

Gasoline vehicle PDTTCs are related to evaporative system failures in half of the situations

- Evaporative system monitor is not required to complete in order to pass Smog Check
- Checking PDTTCs will identify evaporative system faults

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# IMPROVE SMOG CHECK WITH PDTTC – DIESEL VEHICLES

Diesel vehicle PDTTCs are related to after treatment failures in the majority of the situations

- After treatment systems monitors are not required to complete in order to pass Smog Check (any two “not ready” allowed)
- Checking PDTTCs will identify after treatment system faults

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# PDTC TARGETED IMPLEMENTATION DATE

**July 1, 2019**

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# CONDITIONS WHERE PDTC IGNORED

- The vehicle has at least:
  - Completed 15 warm-up cycles and
  - Driven 200 miles
- This provides:
  - The vehicle a reasonable amount of time to recheck for problems
  - The vehicle owner a reasonable amount of time to satisfy the requirement

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# ESTIMATED PDTC FAILURES

- Failure rate on 2010 model year and newer vehicles will rise approximately 1%
- Will result in approximately 155 additional failures statewide per day

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# PROBLEMATIC PDTC VEHICLES

PDTCs will be ignored during Smog Check when:

- The specific vehicle model being tested has been identified as having difficulty clearing a specific PDTC
- BAR is working with CARB and vehicle manufacturers to get these problems resolved

The Smog Check OBD Reference document will be kept up-to-date on BAR's website to identify these cases

[https://www.bar.ca.gov/pdf/Smog\\_Check\\_OBD\\_Reference\\_Full\\_Version.pdf](https://www.bar.ca.gov/pdf/Smog_Check_OBD_Reference_Full_Version.pdf)



# SAMPLE VEHICLE INSPECTION REPORT

## Overall Test Result

**FAIL**



Your vehicle failed the Smog Check inspection. Check your Owner's Manual to determine if the emission failure is repairable under the vehicle manufacturer warranty. Vehicles purchased new in California have an emission performance warranty for a minimum of 3 years or 50,000 miles that guarantees your vehicle passes the inspection. An emission parts warranty of 7 years or 70,000 miles covers certain high cost parts listed in the Owner's Manual. If your vehicle is a Partial Zero Emissions Vehicle (PZEV), the emission warranty extends to 15 years or 150,000 miles. The warranty for PZEV hybrid battery systems is 10 years or 150,000 miles. These warranties require the vehicle has not failed due to lack of scheduled maintenance, and other conditions specified in the vehicle's Owner's Manual. Warranty information by vehicle manufacturer is provided by the Bureau of Automotive Repair at [www.bar.ca.gov](http://www.bar.ca.gov).

BAR's Consumer Assistance Program (CAP) offers financial assistance with emission repairs and a monetary incentive to retire a vehicle from operation. If a warranty service or coverage problem arises, you may file a complaint with BAR. To learn more about CAP or to file a complaint, visit [www.bar.ca.gov](http://www.bar.ca.gov).

Visual Inspection: PASS Functional Inspection: FAIL

Comments: 2012 Nissan Versa with perment DTC P0101. Warms and distance less than threshold. Fails for permanent DTC.

## Visual Inspection Result Information

<u>Result</u>	<u>Inspection Category</u>	<u>Result</u>	<u>Inspection Category</u>
PASS	Air Injection System	PASS	Catalyst
PASS	Computers, Sensors, Switches, and Wiring	PASS	Crankcase Emission Controls
PASS	Exhaust Gas Recirculation (EGR)	PASS	Fuel Evaporative System (EVAP)
PASS	Fuel Metering System	PASS	Other Emission Related Components/Systems
NOTAPPLICABLE	Turbocharger/Supercharger	PASS	Vacuum Lines to Sensors/Switches

## Emission Control Systems Functional Check Results

<u>Result</u>		<u>Result</u>	
PASS	Liquid Fuel Leak Check	FAIL	OBDII
PASS	Smoke Check		

## Permanent Fault Codes



P0101 - Mass or Volume Air Flow Sensor "A" Circuit Range/Performance

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# FURTHER INFORMATION

- BAR sent ET Blast to industry and will send again closer to the July 1, 2019 targeted implementation date.
- BAR's public website contains updated documents at [www.bar.ca.gov](http://www.bar.ca.gov)
  - OBD Reference document
  - FAQs
  - Training material
  - Consumer Fact Sheet

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# QUESTIONS AND COMMENTS

Submit questions and/or comments to:

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