BAR-OIS MODIFIED SOFTWARE IMPLEMENTATION



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ENGINEERING AND RESEARCH BRANCH
BAR ADVISORY GROUP MEETING
JULY 15, 2021

EMISSIONS CONTROL SYSTEM MODIFICATIONS

- Per Vehicle Code section 27156, it is illegal to operate, modify, or sell a vehicle with tampered emissions controls.
 - Cannot operate a motor vehicle with a removed, disabled, or broken pollution control device.
 - Cannot disconnect, modify, or alter any such required device.
 - Cannot install or sell any device that alters the original design or performance of the motor vehicle pollution control system.
- A vehicle's software is considered part of its emissions control system, therefore cannot be modified.

AUTHORITY TO FAIL VEHICLES FOR MODIFIED SOFTWARE

- BAR-OIS regulations adopted on July 1, 2013 include Section 3340.42.2(c)(8)
 - "The vehicle's OBD system data does not match the original equipment manufacturer (OEM) or an Air Resources Board (ARB) exempted OBD software configuration."

MODIFIED SOFTWARE CHECK START DATE

- Beginning July 19, 2021, BAR-OIS inspected vehicles will begin failing when illegally modified emission control system software is identified.
- The Vehicle Inspection Report (VIR) will indicate "Modified Software"

SAMPLE VEHICLE INSPECTION REPORT (VIR)

Smog Check Vehicle Inspection Report (VIR)

Vehicle Information

Test Date/Time: 03/12/2021 @ 6:28 PM

Model Year: 2018 Vehicle Make: HONDA Vehicle Model: CIVIC EX

VIN (scanned from vehicle): 19XFC2F71JE111111

License Plate: AA License State: CA Fuel Type: Gasoline

Certification Type: California Odometer: 132435

Overall Test Result MODIFIED SOFTWARE

Your vehicle failed its Smog Check inspection because the vehicle's computer software does not match an accepted configuration.

Visual Inspection: PASS Functional Inspection: MODIFIED SOFTWARE

Some updated testing for spanish messages on VIR

Visual Inspection Result Information

Result	Inspection Category	Result	Inspection Category
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
PASS	Turbocharger/Supercharger	PASS	Vacuum Lines to Sensors/Switches

Emission Control Systems Functional Check Results

Kestut		Restut	
PASS	Liquid Fuel Leak Check	MODIFIED SW	OBDII
DASS	Smoke Check		

Smog Check Inspection Station Information

 Station ID:
 RC212442
 Inspector Name/ID:
 KWON, BYUNG/E0635582

 yeha
 Software Version/OIS ID:
 20.4.1225.4/CV011209

 1604 halifax
 el dorado hills. CA 95762

(626) 280-1835

IDENTIFYING MODIFIED SOFTWARE

- All vehicles requiring BAR-OIS inspection are subject to the Modified Software check.
- Each vehicle's OBD data is analyzed and compared to data from similar vehicles.
- If the inspected vehicle's data does not match an approved configuration, then the vehicle fails for "Modified Software".
- California Air Resources Board (CARB) Executive Order (EO) approved software will be allowed.
- Preliminary analysis indicates 5-10 vehicles will fail per day statewide for Modified Software.

MODIFIED SOFTWARE REPAIR AND RETEST

- The vehicle's software must be restored to an OEM version or a CARB EO approved version.
- Once restored, the vehicle may be retested at any licensed Smog Check station.
- Vehicles initially directed to a STAR or Referee station must return to that station type to complete the inspection process.
- Modified Software is considered a 'tampered' inspection result and will exclude the vehicle from qualifying for BAR's Repair Assistance Program until the tampered condition is corrected.

BAR/CIC RESPONSE TO PUBLIC INQUIRY

- See the new Q&A, found under Consumer / Smog Check Program / Frequently Asked Questions / Inspection Issues on BAR's website at www.bar.ca.gov.
- Review the Spring 2021 Automotive Repair and Smog Check newsletter article on BAR's website.
- Disputed inspection results will be referred to the Referee for assistance.

NEW Q&A FOR BAR PUBLIC WEBSITE

My vehicle failed a Smog Check for having modified software. What can I do?

Beginning July 19, 2021, vehicles with software not provided by the original equipment manufacturer (OEM) or approved through a <u>California Air Resources Board</u> (CARB) Executive Order (EO) will fail Smog Check.

Before your vehicle will pass a Smog Check, you must take your vehicle to a licensed repair facility to have the vehicle's software restored to the OEM software version. Once the software is restored, have your vehicle reinspected by a licensed Smog Check station. Note that vehicles initially directed to a STAR or Referee station must return to that station type to complete the inspection process.

NEW Q&A FOR BAR PUBLIC WEBSITE (Continued)

If you believe the vehicle's software is already OEM or CARB approved and yet your vehicle failed Smog Check, schedule an appointment with the Smog Check Referee for an inspection.

If you unknowingly purchased a vehicle with illegally-modified software, you may <u>file a complaint</u> with BAR.

SUBSTANTIATION OF OEM SOFTWARE

- If the vehicle owner insists their vehicle's software is OEM, the Referee will require substantiation from an OEM dealership.
- The OEM dealer must provide documentation with a signature stating that the software version, Cal ID, and CVN are appropriate for that exact vehicle.

QUESTIONS AND COMMENTS

Submit questions and/or comments to:

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