

OREGON STATE POLICE

IGNITION INTERLOCK DEVICE OVERSIGHT PROGRAM



OREGON DEVICE CONFIGURATION TEST REQUIREMENTS AND PROCEDURES

(OSP 257-0037 - Effective 06/01/2022)

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PREFACE

The Oregon Department of State Police - Ignition Interlock Device Oversight Program (OSP-IID) Device Configuration Test Requirements and Procedures provide uniform guidance and testing standards conducted by OSP-IID. Pursuant to Oregon Revised Statute (ORS) 813.600(3), OSP-IID shall conduct annual testing of Breath Alcohol Ignition Interlock Devices (BAIID) used in the State of Oregon.

Oregon Device Configuration (ODC) Test as described in OAR 257-100-0005(26), means the testing procedures used by OSP-IID to ensure a device meets the minimum configuration and performance requirements for program qualification.

The ODC Test will be categorized as either an Initial Test or Annual Test. The Initial ODC Test will include all testing procedures as outlined in the Device Configuration Test section on page 4 of this form. The Annual ODC Test will include a simplified version of the testing procedures as outlined in the Device Configuration Test section on page 4 of this form.

The ODC Test will verify BAIID performance standards and requirements as outlined in Oregon Administrative Rule (OAR) Chapter 257, Division 100.

The ODC Test may be used to verify each BAIID model used in Oregon meets or exceeds the minimum national standards set by NHTSA.

The ODC Test may be conducted in the field to represent the product quality and environmental factors endured by persons required to use an ignition interlock device pursuant to ORS 813.602. The ODC Test may not necessarily be conducted in a laboratory or similar scientifically clean environment.

In addition to any International Organization for Standardization (ISO) 17025 certified testing, indicating the device meets or exceeds the Model Specifications for Breath Alcohol Ignition Interlock Devices (BAIIDS) specifications established by NHTSA, OSP-IID will conduct an ODC Test at least once per calendar year.

MISSION STATEMENT

The mission of the Oregon State Police Ignition Interlock Device Oversight Program is to provide premier ignition interlock services and public safety through increased compliance and oversight of device, technician and service center operations throughout Oregon.

DEVICE CONFIGURATION TESTING

Testing Criterion

Pursuant to ORS 813.600(3) and OAR 257-100-0010, every BAIID model listed on, or requesting to be on, the Oregon List of Qualified Devices must be tested by OSP-IID annually.

- A. During an ODC Test, OSP-IID will verify that each BAIID model meets or exceeds Oregon performance standards and requirements outlined in ORS 813.599, 813.600, and Oregon Administrative Rule (OAR) Chapter 257, Division 100.

- B. ODC Tests will include verification of the following:
 - 1. Accuracy of the BAIID;
 - 2. Clearance Rates;
 - 3. User Display;
 - 4. Evaluation of Early Recall;
 - 5. Violation Recording;
 - 6. Circumvention and Tampering;
 - 7. Breath Sample Request Sequences;
 - 8. Vehicle Operation with/without Passing/Failing Breath Samples;
 - 9. Camera Positioning, Durability and Operability;
 - 10. BAIID Data Recording;
 - 11. Accuracy of Information Contained on Weblog; and
 - 12. Contaminants and External Factors (Food, Smoke, Mouthwash, etc).

Accuracy Test

OSP-IID shall conduct ODC Testing using a wet-bath simulator or dry-gas alcohol standard with an alcohol reference value of 0.050 g/210L or less. OSP-IID may use

one or more different alcohol reference values during a single ODC Test. For purposes of the ODC Test, the manufacturer or manufacturer’s representative shall program the BAIID handset to display the BrAC in a digital readout, truncated to a three-decimal place. For purposes of the ODC Test, the BAIID shall record the BrAC within +/- 0.010% of the alcohol reference value to be considered accurate. OSP-IID shall conduct a minimum three accuracy tests with an alcohol reference value of 0.050 g/210L or less.

Since 2019, manufacturer’s representatives operating in Oregon report incidents where a breath sample of 0.05% or greater is registered with a BAIID during the calendar year (12 months). OSP-IID reviews the data provided annually and identifies incidents where the breath sample submitted are cleared within 10 minutes in accordance with ORS 813.599 (BrAC =/< 0.02%).

Year	BrAC (0.05%+)	Cleared (0.02% or less)	Percent
2019	15,865	2,992	19%
2020	11,367	2,953	26%
2021	3,431	TBD	TBD

On average, 22.5% of all breath samples of 0.05% or higher registered by a BAIID are cleared within 10 minutes in accordance with ORS 813.599 (BrAC =/< 0.02%).

Clearance Rate Test

The BAIID shall automatically purge all residual alcohol (reset to zero) and be ready for a test within 3 minutes of a previous test at BrAC =/< 0.05%. Test adherence to this criterion by introducing a 0.05 g/210L or less into the device(s), activate a timer upon receipt of the test result, and record the test result. Record the elapsed time before the device indicates a “ready” condition. Conduct this test at a minimum of three times for each device.

User Display Test

The device shall provide certain types of information feedback to the required driver. These messages include readiness for sample, test outcome, and warning messages. Indicators must be plainly visible or clearly audible to the user denoting the following: Unit is ON, Unit is READY FOR TEST, and Unit has RECEIVED ACCEPTABLE SAMPLE.

Evaluation of Early Recall

When the BAIID registers a BrAC greater than the alcohol set point, as defined in OAR 257-100-0005, the device must enter Early Recall mode. A warning must be displayed on the BAIID advising the required driver that service is due in accordance with OAR Chapter 257, Division 100.

Violation Recording

When a BrAC greater than the alcohol set point is delivered into the BAIID, or when a breath sample request is refused or missed, the BAIID shall register the appropriate violation and enter the BAIID into Early Recall mode. The BAIID must be able to accurately identify all requirements of the violation as outlined in ORS Chapter 813 and OAR Chapter 257, Division 100.

Circumvention

The BAIID must be able to detect, or protect against, illegitimate air samples introduced to the handset. Illegitimate samples may be delivered from the following sources: Non-human delivery sources of air samples such as balloons or compressed air containers and human sources of air samples that are altered through filtration or other means after leaving the mouth.

The BAIID must be capable of detecting or failing non-human breath samples introduced through any of the following:

- Mylar Balloon
- Compressed Air (aerosol can or other source)
- Air pump (used for inflatable mattresses or tires)

The BAIID must be capable of detecting or failing breath samples when filtered using 4 feet (+/- 1inch) long Tygon Tube (3/8" in diameter).

Tampering

The BAIID shall be able to register any external (non-sealed) loss of power. Any attempt to disconnect the BAIID from the vehicle in which it is installed shall be recorded electronically.

The BAIID must be able to register the disconnection from the vehicle during the operation of the vehicle, identify the incident as a tamper on the applicable weblogs, and set the BAIID into Early Recall.

Breath Sample Request Sequence

The BAIID shall be programmed to request breath samples in accordance with OAR 257-100-0050. After a successful initial or follow-up test, the BAIID must require a secondary test ranging randomly from 5 to 10 minutes after starting the vehicle. Subsequent random retests are required at random intervals ranging from 15 to 45 minutes from the previously required retest for the duration of vehicle operation. OSP-IID shall conduct a minimum of three tests of each interval (secondary and random retest) with an alcohol-free sample from either human or non-human source.

Free Restart Test

The BAIID shall permit a free restart (no breath sample required) for 2 minutes +/- 5 seconds. OSP-IID shall conduct a minimum six tests with an alcohol-free sample from either human or non-human source. Three tests at 1 minute-30 seconds or less, and three tests at 2 minutes-ten seconds or more. The BAIID shall allow for an engine start without requiring a sample for all of the first three tests and fail to start without a sample on the subsequent three tests.

Camera Positioning, Durability and Operability

During an ODC Test, OSP-IID will check the BAIID camera to ensure proper securement to the vehicle, proper positioning in accordance with OAR Chapter 257, Division 100, and operability under various lighting conditions. OSP-IID will conduct one or more breath sample tests in low light conditions and one or more breath sample tests in high light conditions.

BAIID Data Recording

OSP-IID will require vehicle use information recording. A BAIID shall have the capability to record the nature of such use and the test outcomes during the stipulated period. The following types of information shall be recorded by the BAIID:

- Efforts to disable the unit,
- Date and time of vehicle use,
- Breath Alcohol Concentration (BrAC) levels,
- Starting/Stopping of vehicle engine,
- Service Reminder,
- Date service performed,
- Digital photographs during device operation,
- Global Positioning System (GPS).

Weblog Accuracy

OSP-IID will require the manufacturer or manufacturer's representative to ensure accurate information of the vehicle operation and BAIID use on the applicable weblog system. Data information captured by the BAIID must accurately match the information detailed on the associated weblog. OSP-IID will compare the data obtained during the ODC Test to the information listed on the manufacturer's or manufacturer's representative's weblog.

Contaminants and External Factors

OSP-IID will use various products that may cause contamination of a breath sample. Contaminants used may include, but are not limited to mouthwash, bread or other yeast product, energy drink, soft drink, perfume, hand-sanitizer, and candy. The purpose of introducing contaminants or other external factors is to determine how each BAIID model will react and record the incident. There is no pass/fail for this section of the ODC Test.

ANNUAL TESTING

At a minimum, annual ODC Tests will include verification of the following:

1. Accuracy of the BAIID;
2. Clearance Rates;
3. User Display;
4. Evaluation of Early Recall;
5. Violation Recording;
6. Breath Sample Request Sequences;
7. Vehicle Operation with/without Passing/Failing Breath Samples;
8. Camera Positioning and Securement;
9. BAIID Data Recording; and
10. Accuracy of Information Contained on Weblog.

Annual Accuracy Test

OSP-IID shall conduct ODC Testing using a wet-bath simulator or dry-gas alcohol standard with an alcohol reference value of 0.050 g/210L or less. OSP-IID may use one or more different alcohol reference values during a single ODC Test. For purposes of the ODC Test, the manufacturer or manufacturer's representative shall program the BAIID handset to display the BrAC in a digital readout, truncated to a three-decimal place. For purposes of the Annual ODC Test, the BAIID shall record the BrAC within +/- 0.010% of the alcohol reference value to be considered accurate. OSP-IID shall conduct a minimum one accuracy test with an alcohol reference value of 0.050 g/210L or less.

Annual Clearance Rate Test

The BAIID shall automatically purge all residual alcohol (reset to zero) and be ready for a test within 3 minutes of a previous test at BrAC \leq 0.05%. Test adherence to this criterion by introducing a 0.05 g/210L or less into the device(s),

activate a timer upon receipt of the test result, and record the test result. Record the elapsed time before the device indicates a “ready” condition. Conduct this test at a minimum of three times for each device.

Annual User Display Test

The device shall provide certain types of information feedback to the required driver. These messages include readiness for sample, test outcome, and warning messages. Indicators must be plainly visible or clearly audible to the user denoting the following: Unit is ON, Unit is READY FOR TEST, and Unit has RECEIVED ACCEPTABLE SAMPLE.

Annual Evaluation of Early Recall

When the BAIID registers a BrAC greater than the alcohol set point, as defined in OAR 257-100-0005, the device must enter Early Recall mode. A warning must be displayed on the BAIID advising the required driver that service is due in accordance with OAR Chapter 257, Division 100.

Annual Violation Recording

When a BrAC greater than the alcohol set point is delivered into the BAIID, or when a breath sample request is refused or missed, the BAIID shall register the appropriate violation and enter the BAIID into Early Recall mode. The BAIID must be able to accurately identify all requirements of the violation as outlined in ORS Chapter 813 and OAR Chapter 257, Division 100.

Annual Breath Sample Request Sequence

The BAIID shall be programmed to request breath samples in accordance with OAR 257-100-0050. After a successful initial or follow-up test, the BAIID must require a secondary test ranging randomly from 5 to 10 minutes after starting the vehicle. Subsequent random retests are required at random intervals ranging from 15 to 45 minutes from the previously required retest for the duration of vehicle operation. OSP-IID shall conduct a minimum of one test of each interval

(secondary and random retest) with an alcohol-free sample from either human or non-human source.

Annual Free Restart Test

The BAIID shall permit a free restart (no breath sample required) for 2 minutes +/- 5 seconds. During an annual ODC Test, OSP-IID shall conduct a minimum two tests with an alcohol-free sample from either human or non-human source. At least one test at 1 minute-30 seconds or less, and one test at 2 minutes-ten seconds or more. The BAIID shall allow for an engine start without requiring a sample for the first test and fail to start without a sample on the second test.

Camera Positioning and Securement

During an annual ODC Test, OSP-IID will check the BAIID camera to ensure proper securement to the vehicle and proper positioning in accordance with OAR Chapter 257, Division 100.

Weblog Accuracy

OSP-IID will require the manufacturer or manufacturer's representative to ensure accurate information of the vehicle operation and BAIID use on the applicable weblog system. Data information captured by the BAIID must accurately match the information detailed on the associated weblog. OSP-IID will compare the data obtained during the ODC Test to the information listed on the manufacturer's or manufacturer's representative's weblog.

MODIFIED DEVICE CONFIGURATION TEST

If a BAIID fails an Initial or Annual ODC Test, a Modified Device Configuration (MDC) Test may be conducted to determine or verify the correction of a disqualifying factor(s) outlined in a previous ODC test, or as a result of an investigation by OSP-IID.

MDC Tests will only be utilized under the following circumstances:

- After an ODC Test has been conducted for an initial qualification;

- After an ODC Test has been conducted as part of the required annual testing;
- To identify, verify or disprove a specific disqualifying factor(s) during a citizen complaint investigation.

BAIID Retest Protocols

If an MDC Test is conducted in conjunction of a qualification or annual testing, OSP-IID shall utilize a minimum of three BAIIDs to determine the status of the disqualifying factor(s). At least two devices must indicate the disqualifying factor(s) has been corrected to receive a passing test report. If two or more BAIIDs indicate the disqualifying factor(s) were not corrected in accordance with ORS and OAR, the applicable BAIID model will deemed as “Failed.”

REPORTING

Oregon Device Configuration Test Reports

- A. Oregon device configuration test reports will be documented using OSP Form 257-0018.
- B. The ODC Test report should be completed and sent to the applicable manufacturer or manufacturer’s representative within 7 calendar days following the testing and data download of the BAIID.
- C. If an ODC Test identifies a critical disqualifying factor, the vendor will be offered 14 calendar days to correct the critical disqualifying factor.
 1. Critical disqualifying factors include, but are not limited to, the following:
 - a. Device records Breath Alcohol Concentration (BrAC) level greater than 0.010% (+/-) from the alcohol reference value.
 - b. Vehicle engine start without providing a breath sample.
 - c. Vehicle engine start with a breath sample above the alcohol set point.

- d. Vehicle engine start using non-human or filtered human breath sample.
2. Pursuant to OAR 257-100-0020, failure or refusal to meet qualification deadline, regarding critical disqualifying factors, a device shall result in the immediate suspension and/or removal from the Oregon List of Qualified Devices.
- D. If an ODC Test identifies a non-critical disqualifying factor, the vendor will be offered 60 calendar days to correct the non-critical disqualifying factor.
1. Non-critical disqualifying factors include, but are not limited to, the following:
 - a. Breath samples at or above the alcohol set point not being recorded as failures.
 - b. Photographs not taken in accordance with OAR 257-100-0050.
 - c. GPS not recorded in accordance with OAR 257-100-0050.
 - d. Early recall not properly programmed pursuant to OAR Chapter 257, Division 100.
 - e. Breath sample request sequences not properly programmed in accordance with OAR Chapter 257, Division 100.
 - f. Free restart not properly programmed pursuant to OAR Chapter 257, Division 100.
 2. Pursuant to OAR 257-100-0020, failure or refusal to meet qualification deadline, regarding non-critical disqualifying factors, a device shall result in the suspension and/or removal from the Oregon List of Qualified Devices.