TP-933

Test Procedure for Determining Evaporative Emissions from Off-Highway Recreational Vehicles

Alternative Test Procedure ATP-04

Adopted: November 5, 2014 Alternative Test Procedure Approved June 5, 2023

California Air Resources Board

Note: This is a newly adopted test procedure shown without underline as permitted by California Code of Regulations.

This alternative test procedure is formatted in a style to indicate changes from the existing test procedures. All existing language is indicated by plain type. All additions to the existing language are indicated by highlighted yellow. All deletions to the existing language are indicated by strikeout. Only those sections containing the modifications from the existing language are included. All other portions remain unchanged and are indicated by the notation [*****] for reference.

* * * * *

5 EVAPORATIVE EMISSIONS SYSTEM PRECONDITIONING

The purpose of the preconditioning period is to introduce test fuel into the fuel system and condition all fuel system components to in-use conditions. Evaporative system preconditioning can be done in conjunction with mileage accumulation for exhaust testing as long as the fuel system has continuously held evaporative test fuel E10 (commercial pump fuel containing 10 percent ethanol) for a total of 140 days. E10 pump fuel may only be used for the portion of the soaking period; however, fuel must be switched to E10 test fuel for a minimum of 30 days prior to testing. The preconditioning procedure shall include the steps outlined in Figure 5.1

Start **Evaporative Emissions Emission System** Preconditioning (Section 5) Soak Fuel System **Alternative Note:** Components Notwithstanding the note at left, § 5.2 Testing may (Section 5.1) occur after § 5.1 Testing if the § 5.1 Testing includes Note: Section 5.2 Testing Must Occur During the Carbon Canister for the entire fuel soak period. If Section 5.1 Testing the soaked test rig is transported to a 2nd test lab after Precondition § 5.1 to complete the TP-933 testing, the test rig must Carbon Canister be exposed to fuel during transportation. (Section 5.2) End **Evaporative System** Preconditioning

Figure 5.1: Alternative Preconditioning Flowchart

5.1 Soak Fuel System Components

* * * * *

If the soaked fuel system is transported to a second laboratory after conducting the §5.1 soak, it must be subjected to a 1-week presoak with fresh fuel at a temperature no higher than 95 °F, prior to beginning any test sequence to measure running loss, hot soak, or diurnal emissions.

* * * * *

5.2 Precondition Carbon Canister

• For systems that utilize carbon canisters, subsections 5.2.2 through 5.2.4 of the preconditioning sequence must be completed no sooner than 96 hours preceding the beginning of the evaporative emission test procedure described in section 6 at $86^{\circ} \pm 3^{\circ}$ F.

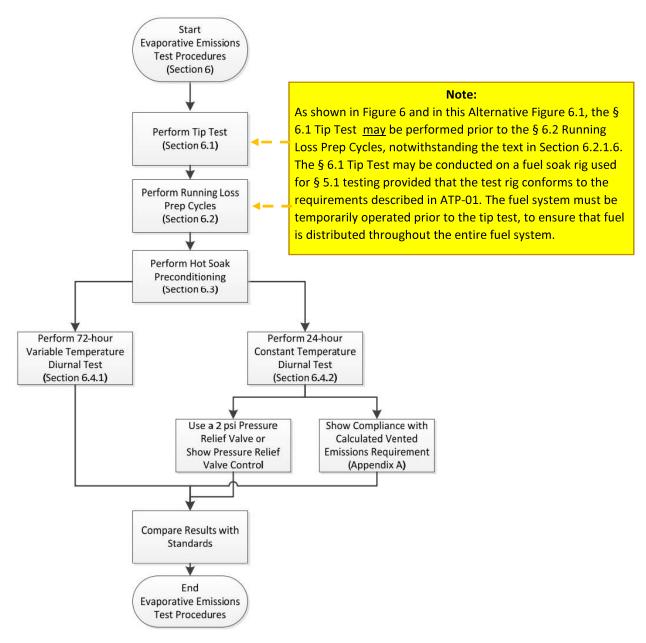
This means that the canister loading must be completed within the 96-hour window before the start of section 6, to ensure that the canister does not spend too much time in a loaded state.

* * * * *

6 EVAPORATIVE EMISSIONS TEST PROCEDURES

The Evaporative Emissions Test Procedures shall include the steps outlined in Figure 6.1.

Figure 6.1: Alternative Evaporative Emissions Testing Flowchart



* * * * *

ATP-04 PROCESS FLOWCHART TP-933 Process incorporating ATP-04

Boxes outlined in thick border deviate from TP-933 Test Procedure per ATP-04 Proposal

