

Environmental Protection Agency

§ 1051.620

emissions for at least 1 minute. Calculate cycle statistics for the sequence of modes and compare with the specified values in 40 CFR 1065.514 to confirm that the test is valid.

(2) For ramped-modal testing, start sampling at the beginning of the first mode and continue sampling until the end of the last mode. Calculate emis-

sions and cycle statistics the same as for transient testing.

(3) Measure emissions by testing the engine on a dynamometer with one or more of the following sets of duty cycles to determine whether it meets applicable emission standards:

(i) The following duty cycle applies for discrete-mode testing:

TABLE 1 OF § 1051.615—6-MODE DUTY CYCLE FOR RECREATIONAL ENGINES

Mode No.	Engine speed (percent) ¹	Torque (percent) ²	Minimum time in mode (minutes)	Weighting factors
1	85	100	5.0	0.09
2	85	75	5.0	0.20
3	85	50	5.0	0.29
4	85	25	5.0	0.30
5	85	10	5.0	0.07
6	(³)	0	5.0	0.05

¹ Percent speed is percent of maximum test speed.
² Percent torque is percent of maximum test torque at maximum test speed.
³ Idle.

(ii) The following duty cycle applies for ramped-modal testing:

TABLE 2 OF § 1051.615—RAMPED-MODAL CYCLE FOR TESTING RECREATIONAL ENGINES

RMC mode	Time	Speed (percent) ^{1,2}	Torque (percent) ^{2,3}
1a Steady-state	41	Warm Idle	0
1b Transition	20	Linear Transition	Linear Transition.
2a Steady-state	135	85	100
2b Transition	20	85	Linear Transition.
3a Steady-state	112	85	10
3b Transition	20	85	Linear Transition.
4a Steady-state	337	85	75
4b Transition	20	85	Linear Transition.
5a Steady-state	518	85	25
5b Transition	20	85	Linear Transition.
6a Steady-state	494	85	50
6b Transition	20	Linear Transition	Linear Transition.
7 Steady-state	43	Warm Idle	0

¹ Percent speed is percent of maximum test speed.
² Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode.
³ Percent torque is percent of maximum test torque at the commanded test speed.

(4) During idle mode, hold the speed within your specifications, keep the throttle fully closed, and keep engine torque under 5 percent of the peak torque value at maximum test speed.

(5) For the full-load operating mode, operate the engine at wide-open throttle.

(6) See 40 CFR part 1065 for detailed specifications of tolerances and calculations.

(e) All other requirements and prohibitions of this part apply to these engines and vehicles.

[67 FR 68347, Nov. 8, 2002, as amended at 70 FR 40503, July 13, 2005]

§ 1051.620 When may a manufacturer obtain an exemption for competition recreational vehicles?

(a) We may grant you an exemption from the standards and requirements of this part for a new recreational vehicle on the grounds that it is to be used

solely for competition. The provisions of this part other than those in this section do not apply to recreational vehicles that we exempt for use solely for competition.

(b) We will exempt vehicles that we determine will be used solely for competition. The basis of our determinations are described in paragraphs (b)(1), (b)(2), and (c) of this section. Exemptions granted under this section are good for only one model year and you must request renewal for each subsequent model year. We will not approve your renewal request if we determine the vehicles will not be used solely for competition.

(1) *Off-highway motorcycles.* Motorcycles that are marketed and labeled as only for competitive use and that meet at least four of the criteria listed in paragraphs (b)(1)(i) through (vi) of this section are considered to be used solely for competition, except in cases where other information is available that indicates that they are not used solely for competition. The following features are indicative of motorcycles used solely for competition:

- (i) The absence of a headlight or other lights.
- (ii) The absence of a spark arrestor.
- (iii) The absence of manufacturer warranty.
- (iv) Suspension travel greater than 10 inches.
- (v) Engine displacement greater than 50 cc.
- (vi) The absence of a functional seat. (For example, a seat with less than 30 square inches of seating surface would generally not be considered a functional seat).

(2) *Snowmobiles and ATVs.* Snowmobiles and ATVs meeting all of the following criteria are considered to be used solely for competition, except in cases where other information is available that indicates that they are not used solely for competition:

- (i) The vehicle or engine may not be displayed for sale in any public dealership.
- (ii) Sale of the vehicle must be limited to professional racers or other qualified racers.
- (iii) The vehicle must have performance characteristics that are substan-

tially superior to noncompetitive models.

(c) Vehicles not meeting the applicable criteria listed in paragraph (b) of this section will be exempted only in cases where the manufacturer has clear and convincing evidence that the vehicles will be used solely for competition.

(d) You must permanently label vehicles exempted under this section to clearly indicate that they are to be used only for competition. Failure to properly label a vehicle will void the exemption for that vehicle.

(e) If we request it, you must provide us any information we need to determine whether the vehicles are used solely for competition.

[67 FR 68347, Nov. 8, 2002, as amended at 70 FR 40504, July 13, 2005]

§ 1051.625 What special provisions apply to unique snowmobile designs for small-volume manufacturers?

(a) If you are a small-volume manufacturer, we may permit you to produce up to 600 snowmobiles per year that are certified to less stringent emission standards than those in § 1051.103, as long as you meet all the conditions and requirements in this section.

(b) To apply for alternate standards under this section, send the Designated Officer a written request. In your request, do two things:

(1) Show that the snowmobile has unique design, calibration, or operating characteristics that make it atypical and infeasible or highly impractical to meet the emission standards in § 1051.103, considering technology, cost, and other factors.

(2) Identify the level of compliance you can achieve, including a description of available emission-control technologies and any constraints that may prevent more effective use of these technologies.

(c) You must give us other relevant information if we ask for it.

(d) An authorized representative of your company must sign the request and include the statement: "All the information in this request is true and accurate, to the best of my knowledge."