

$$t_{\text{unpaired}} = (I_{\text{avg}} - R_{\text{avg}}) / ((I_{\text{sd}}^2 + R_{\text{sd}}^2) / n)^{1/2}$$

(5) For a paired comparison, calculate the “n – 1” standard deviation (squared) of the differences, d_i , between the paired results, where “i” represents the i th test of n number of tests:

$$S_D^2 = (Sd_i^2 - ((Sd_i)^2 / n)) / (n - 1)$$

(6) For a paired comparison, calculate the t-value:

$$t_{\text{paired}} = (I_{\text{avg}} - R_{\text{avg}}) / (S_D^2 / n)^{1/2}$$

(d) The absolute value of t must be less than the critical t value, t_{crit} at a 95% confidence interval for “n – 1” degrees of freedom. Table 2 of this section lists 95% confidence interval t_{crit} values for $n - 1$ degrees of freedom.

TABLE 1 OF § 1065.910.—95% CONFIDENCE INTERVAL CRITICAL F VALUES FOR F-TEST

nR – 1	nl – 1	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6	4.284	4.207	4.147	4.099	4.06	4.027	4	3.976	3.956	3.938	3.922	3.908	3.896	3.884	3.874
7	3.866	3.787	3.726	3.677	3.637	3.603	3.575	3.55	3.529	3.511	3.494	3.48	3.467	3.455	3.445
8	3.581	3.5	3.438	3.388	3.347	3.313	3.284	3.259	3.237	3.218	3.202	3.187	3.173	3.161	3.15
9	3.374	3.293	3.23	3.179	3.137	3.102	3.073	3.048	3.025	3.006	2.989	2.974	2.96	2.948	2.936
10	3.217	3.135	3.072	3.02	2.978	2.943	2.913	2.887	2.865	2.845	2.828	2.812	2.798	2.785	2.774
11	3.095	3.012	2.948	2.896	2.854	2.818	2.788	2.761	2.739	2.719	2.701	2.685	2.671	2.658	2.646
12	2.996	2.913	2.849	2.796	2.753	2.717	2.687	2.66	2.637	2.617	2.599	2.583	2.568	2.555	2.544
13	2.915	2.832	2.767	2.714	2.671	2.635	2.604	2.577	2.554	2.533	2.515	2.499	2.484	2.471	2.459
14	2.848	2.764	2.699	2.646	2.602	2.565	2.534	2.507	2.484	2.463	2.455	2.428	2.413	2.4	2.388
15	2.79	2.707	2.641	2.588	2.544	2.507	2.475	2.448	2.424	2.403	2.385	2.368	2.353	2.34	2.328
16	2.741	2.657	2.591	2.538	2.494	2.456	2.425	2.397	2.373	2.352	2.333	2.317	2.302	2.288	2.276
17	2.699	2.614	2.548	2.494	2.45	2.413	2.381	2.353	2.329	2.308	2.289	2.272	2.257	2.243	2.23
18	2.661	2.577	2.51	2.456	2.412	2.374	2.342	2.314	2.29	2.269	2.25	2.233	2.217	2.203	2.191
19	2.628	2.544	2.477	2.423	2.378	2.34	2.308	2.28	2.256	2.234	2.215	2.198	2.182	2.168	2.155
20	2.599	2.514	2.447	2.393	2.348	2.31	2.278	2.25	2.225	2.203	2.184	2.167	2.151	2.137	2.124

TABLE 2 OF § 1065.910.—95% CONFIDENCE INTERVAL CRITICAL T VALUES FOR T-TEST

n – 1	t_{crit}
6	2.45
7	2.36
8	2.31
9	2.26
10	2.23
11	2.20
12	2.18
13	2.16
14	2.14
15	2.13
16	2.12
17	2.11
18	2.10
19	2.09
20	2.09

PART 1068—GENERAL COMPLIANCE PROVISIONS FOR NONROAD PROGRAMS

77. The authority citation for part 1068 continues to read as follows:

Authority: 42 U.S.C. 7401–7671(q).

78. Section 1068.1 is amended by revising paragraph (a), removing and reserving paragraph (b)(5), and adding paragraph (e) to read as follows:

§ 1068.1 Does this part apply to me?

(a) The provisions of this part apply to everyone with respect to the following engines and to equipment using the following engines (including owners, operators, parts manufacturers, and persons performing maintenance).

(1) Large nonroad spark-ignition engines we regulate under 40 CFR part 1048.

(2) Recreational SI engines and vehicles that we regulate under 40 CFR part 1051 (such as snowmobiles and off-highway motorcycles).

(3) Land-based nonroad diesel engines that we regulate under 40 CFR part 1039.

* * * * *

(e)(1) The provisions of §§ 1068.30, 1068.310, and 1068.320 apply for stationary spark-ignition engines beginning January 1, 2004, and for stationary compression-ignition engines beginning January 1, 2006.

(2) The provisions of §§ 1068.30 and 1068.235 apply for the types of engines listed in paragraph (a) of this section beginning January 1, 2004, where they are used solely for competition.

79. Section 1068.27 is added to read as follows:

§ 1068.27 May EPA conduct testing with my production engines?

If we request it, you must make a reasonable number of production-line engines available for a reasonable time so we can test or inspect them for compliance with the requirements of this chapter.

80. Section 1068.30 is amended by adding in alphabetical order a definition of “Aftertreatment” to read as follows:

§ 1068.30 What definitions apply to this part?

* * * * *

Aftertreatment means relating to any system, component, or technology mounted downstream of the exhaust

valve or exhaust port whose design function is to reduce exhaust emissions.

* * * * *

81. Section 1068.101 is amended by revising paragraph (a)(1) and adding paragraph (b)(6) to read as follows:

§ 1068.101 What general actions does this regulation prohibit?

(a) * * *

(1) You may not sell, offer for sale, or introduce or deliver into commerce in the United States or import into the United States any new engine or equipment after emission standards take effect for that engine or equipment, unless it has a valid certificate of conformity for its model year and the required label or tag. You also may not take any of the actions listed in the previous sentence with respect to any equipment containing an engine subject to this part’s provisions, unless the engine has a valid and appropriate certificate of conformity and the required engine label or tag. For purposes of this paragraph (a)(1), an appropriate certificate of conformity is one that applies for the same model year as the model year of the equipment (except as allowed by § 1068.105(a)), covers the appropriate category of engines (such as locomotive or CI marine), and conforms to all requirements specified for equipment in the standard-setting part. This requirements of this paragraph (a)(1) also cover new engines you produce to replace an older engine in a piece of equipment, unless the engine qualifies for the replacement-engine exemption in § 1068.240. We may assess a civil