40 C.F.R. § 86.529-98

Road load force and inertia weight determination.

(a)

(1) Road load as a function of speed is given by the following equation:

F = A + CV

(2) The values for coefficients A and C and the test inertia are given in Figure F98-9 of this section. Velocity V is in km/h and force (F) is in newtons. The forces given by the equation in paragraph (a)(1) of this section shall be simulated to the best ability of the equipment being used.

(b) The inertia given in Figure F98-9 shall be used. Motorcycles with loaded vehicle mass outside these limits shall be tested at an equivalent inertial mass and road load force specified by the Administrator. Figure F98-9 follows:

Figure F98-9

Loaded vehicle mass (kg)	Equivalent inertial mass (kg)	Force coefficients		Force at 65 km/h (nt)	70 to 60 km/h coastdown calibration times		
		A (nt)	C (nt/(km/h) 2)		Target time (sec)	Allowable tolerance	
						Longest time (sec)	Shortest time (sec)
95-105	100	0.0	.0224	94.8	2.95	3.1	2.8
106-115	110	0.82	.0227	96.8	3.18	3.3	3.0
116-125	120	1.70	.0230	98.8	3.39	3.6	3.2
126-135	130	2.57	.0233	100.9	3.60	3.8	3.4
136-145	140	3.44	.0235	102.9	3.80	4.0	3.6
146-155	150	4.32	.0238	104.9	3.99	4.2	3.8
156-165	160	5.19	.0241	107.0	4.10	4.4	4.0
166-175	170	6.06	.0244	109.0	4.36	4.6	4.2
176-185	180	6.94	.0246	111.0	4.53	4.7	4.3
186-195	190	7.81	.0249	113.1	4.69	4.9	4.5

196-205	200	8.69	.0252	115.1	4.85	5.1	4.6
206-215	210	9.56	.0255	117.1	5.00	5.2	4.8
216-225	220	10.43	.0257	119.2	5.15	5.4	4.9
226-235	230	11.31	.0260	121.2	5.30	5.5	5.1
236-245	240	12.18	.0263	123.2	5.43	5.7	5.2
246-255	250	13.06	.0266	125.3	5.57	5.8	5.4
256-265	260	13.93	.0268	127.3	5.70	5.9	5.5
266-275	270	14.80	.0271	129.3	5.82	6.1	5.6
276-285	280	15.68	.0274	131.4	5.95	6.2	5.7
286-295	290	16.55	.0277	133.4	6.06	6.3	5.8
296-305	300	17.43	.0279	135.4	6.18	6.4	6.0
306-315	310	18.30	.0282	137.5	6.29	6.5	6.1
316-325	320	19.17	.0285	139.5	6.40	6.6	6.2
326-335	330	20.05	.0288	141.6	6.50	6.7	6.3
336-345	340	20.92	.0290	143.6	6.60	6.8	6.4
346-355	350	21.80	.0293	145.6	6.70	6.9	6.5
356-365	360	22.67	.0296	147.7	6.80	7.0	6.6
366-375	370	23.54	.0299	149.7	6.89	7.1	6.7
376-385	380	24.42	.0301	151.7	6.98	7.2	6.8
386-395	390	25.29	.0304	153.8	7.07	7.3	6.9
396-405	400	26.17	.0307	155.8	7.16	7.4	6.9
406-415	410	27.04	.0310	157.8	7.24	7.5	7.0
416-425	420	27.91	.0312	159.9	7.33	7.6	7.1
426-435	430	28.79	.0315	161.9	7.41	7.6	7.2
436-445	440	29.66	.0317	163.7	7.49	7.7	7.3
446-455	450	30.54	.0318	164.9	7.61	7.8	7.4
456-465	460	31.41	.0319	166.0	7.73	8.0	7.5
466-475	470	32.28	.0319	167.1	7.84	8.1	7.6

476-485	480	33.16	.0320	168.3	7.95	8.2	7.7
486-495	490	34.03	.0320	169.4	8.06	8.3	7.8
496-505	500	34.90	.0321	170.5	8.17	8.4	7.9
506-515	510	35.78	.0322	171.7	8.28	8.5	8.0
516-525	520	36.65	.0322	172.8	8.39	8.6	8.2
526-535	530	37.53	.0323	173.9	8.49	8.7	8.3
536-545	540	38.40	.0323	175.1	8.60	8.8	8.4
546-555	550	39.27	.0324	176.2	8.70	9.0	8.5
556-565	560	40.15	.0325	177.3	8.80	9.1	8.6
566-575	570	41.02	.0325	178.5	8.90	9.2	8.7
576-585	580	41.90	.0326	179.6	9.00	9.3	8.8
586-595	590	42.77	.0327	180.8	9.10	9.4	8.9
596-605	600	43.64	.0327	181.9	9.19	9.5	8.9
606-615	610	44.52	.0328	183.0	9.29	9.5	9.0
616-625	620	45.39	.0328	184.2	9.38	9.6	9.1
626-635	630	46.27	.0329	185.3	9.47	9.7	9.2
636-645	640	47.14	.0330	186.4	9.56	9.8	9.3
646-655	650	48.01	.0330	187.6	9.65	9.9	9.4
656-665	660	48.89	.0331	188.7	9.74	10.0	9.5
666-675	670	49.76	.0332	189.8	9.83	10.1	9.6
676-685	680	50.64	.0332	191.0	9.92	10.2	9.7
686-695	690	51.51	.0333	192.1	10.01	10.3	9.8
696-705	700	52.38	.0333	193.2	10.09	10.4	9.8
706-715	710	53.26	.0334	194.4	10.17	10.4	9.9
716-725	720	54.13	.0335	195.5	10.26	10.5	10.0
726-735	730	55.01	.0335	196.6	10.34	10.6	10.1
736-745	740	55.88	.0336	197.8	10.42	10.7	10.2
746-755	750	56.75	.0336	198.9	10.50	10.8	10.2

756-765	760	57.63	.0337	200.1	10.58	10.9	10.3
766-775	770	58.50	.0338	201.2	10.66	10.9	10.3
776-785	780	59.38	.0338	203.3	10.74	11.0	10.4
786-795	790	60.25	.0339	204.5	10.82	11.1	10.5
796-805	800	61.12	.0339	205.6	10.91	11.2	10.6
806-815	810	62.00	.0340	206.7	10.99	11.3	10.7
816-825	820	62.87	.0341	207.9	11.07	11.4	10.8
826-835	830	63.75	.0341	209.0	11.15	11.5	10.8
836-845	840	64.62	.0342	210.1	11.24	11.5	10.9
846-855	850	65.49	.0343	211.3	11.32	11.6	11.0
856-865	860	66.37	.0343	212.4	11.40	11.7	11.1
866-873	870	67.24	.0344	213.5	11.48	11.8	11.2