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Cooperative Engineering Program

**SAE J1506 JUN88**

**Emission Test  
Driving Schedules**

SAE Information Report  
Issued June 1988

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EMISSION TEST DRIVING SCHEDULES

1. SCOPE:

This SAE Information Report describes various dynamometer driving schedules currently in use in the world for measurement of exhaust emissions and fuel economy of passenger cars and light trucks. Issuance of this information report will allow driving schedules to be deleted from individual test procedures, thus reducing the amount of repeated information in the SAE Handbook.

This information report includes:

- 1 - Descriptions of driving schedules.
- 2 - Second-by second definition of speed versus time sequences.

2. DESCRIPTIONS OF DRIVING SCHEDULES:

- 2.1 United States (US) 1972 Schedule; Also Known as EPA Urban Dynamometer Driving Schedule (UDDS), 1972 Federal Test Procedure (FTP) Schedule, LA-4 Schedule, or Swedish A10 Test Schedule: This test schedule requires 1372 seconds to complete and covers a distance of 7.5 miles (12.1 km) at an average speed of 19.55 mph (31.46 km/h). A second-by-second description of this schedule is shown in Table I. The driving schedule is defined by a smooth curve drawn through the specified speed versus time relationship.
- 2.2 505 Schedule: This schedule consists of the first 505 s of the US 1972 Schedule and covers a distance of 3.59 miles (5.78 km). The average speed of this schedule is 25.6 mph (41.2 km/h). This schedule can be run from a cold start, but is normally run with a fully warmed-up vehicle and is then referred to as a Hot 505 Schedule. There is a 10-minute "hot soak", where the fully warmed-up vehicle is at rest with the engine and cooling fan off, and the hood closed, just prior to the engine start. This driving schedule is often used for emissions development work.

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- 2.3 US 1975 Schedule, or 1975 FTP Schedule: This schedule consists of a 1972 FTP Schedule, followed by a 10-minute hot soak, followed by a repeat of the first 505 s of the 1972 FTP Schedule (505 Schedule). This same driving schedule is retained in the 1978 revisions to the US Federal regulations (40 CFR 6.144-78), so it is also sometimes called the 1978 schedule. Effective in 1978, the actual distance driven using this driving schedule, rather than the theoretical distance is used in the calculation of official exhaust emission and "city" fuel economy values.
- 2.4 Highway Fuel Economy Test Schedule (HWFET): This schedule consists of two 765 s driving cycles, with emissions collected during the second cycle only. The average speed of each 10.2 mile (16.4 km) cycle is 48.6 mph (78.2 km/h). A second-by-second description of this cycle is shown in Table 2. This schedule is used in the US to obtain the official "highway" fuel economy figures.
- 2.5 Economic Commission for Europe (ECE) R15.04 Schedule: This test schedule is run in official certification for exhaust emissions and fuel economy of vehicles offered for sale in many European countries. This schedule can be run hot or cold, and is run 4 times in succession. There are small differences in the schedule depending on whether the vehicle has a manual or an automatic transmission. The schedule covers a total distance of 4.06 km (2.52 miles) at an average speed of 18.7 km/h (11.6 mph) with a manual transmission vehicle and 3.98 (2.47 miles) at an average speed of 18.4 km/h (11.4 mph) with an automatic transmission vehicle. Emissions are not collected during an initial 40-s idle period. A second-by-second description of this schedule is shown in Tables 3A and 3B, for manual and automatic transmission equipped vehicles, respectively.
- 2.6 Japanese 10-Mode Test Schedule: This driving schedule is part of the official vehicle emissions test used for Japanese certification. This schedule is driven with a fully warmed-up vehicle following a 10 km (6 mile) preconditioning. A second-by-second description of the schedule is shown in Table 4. The schedule is run 6 times in succession, with the exhaust gas sampled only during the last five times. The distance traveled during these last 5 times is 3.32 km (2.06 miles) with an average speed of 18 km/h (11.2 mph).
- 2.7 Japanese 11-Mode Test Schedule: This driving schedule is part of the official vehicle emissions test used for Japanese certification for vehicles built after the 1976 model year. This schedule is driven from a cold start. A second-by-second description of the schedule is shown in Table 5. The schedule is run 4 times in succession. The total distance traveled is then 4.08 km (2.54 miles) at an average speed of 30.6 km/h (19.0 mph).

TABLE 1 - US 1972 Schedule

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)			
0	0.0	0.0	98	29.5	47.5	196	36.2	58.2	294	50.1	80.6	392	14.5	23.3	490	34.6	55.7	588	16.6	26.7
1	0.0	0.0	99	29.8	47.9	197	37.3	60.0	295	50.0	80.4	393	12.0	19.3	491	34.5	55.5	589	16.5	26.5
2	0.0	0.0	100	30.3	48.8	198	39.3	63.2	296	49.6	79.8	394	8.7	14.0	492	33.5	53.9	590	16.5	26.5
3	0.0	0.0	101	30.7	49.4	199	40.5	65.2	297	49.5	79.6	395	5.4	8.7	493	32.0	51.4	591	16.6	26.7
4	0.0	0.0	102	30.9	49.7	200	42.1	67.7	298	49.5	79.6	396	2.1	3.4	494	30.1	48.4	592	17.0	27.4
5	0.0	0.0	103	31.0	49.9	201	43.5	70.0	299	49.5	79.6	397	0.0	0.0	495	28.0	45.1	593	17.6	28.3
6	0.0	0.0	104	30.9	49.7	202	45.1	72.6	300	49.1	79.0	398	0.0	0.0	496	25.5	41.0	594	18.5	29.8
7	0.0	0.0	105	30.4	48.9	203	46.0	74.0	301	48.6	78.2	399	0.0	0.0	497	22.5	36.2	595	19.2	30.9
8	0.0	0.0	106	29.8	47.9	204	46.8	75.3	302	48.1	77.4	400	0.0	0.0	498	19.8	31.9	596	20.2	32.5
9	0.0	0.0	107	29.9	48.1	205	47.5	76.4	303	47.2	75.9	401	0.0	0.0	499	16.5	26.5	597	21.0	33.8
10	0.0	0.0	108	30.2	48.6	206	47.5	76.4	304	46.1	74.2	402	0.0	0.0	500	13.2	21.2	598	21.1	33.9
11	0.0	0.0	109	30.7	49.4	207	47.3	76.1	305	45.0	72.4	403	2.6	4.2	501	10.3	16.6	599	21.2	34.1
12	0.0	0.0	110	31.2	50.2	208	47.2	75.9	306	43.8	70.5	404	5.9	9.5	502	7.2	11.6	600	21.6	34.8
13	0.0	0.0	111	31.8	51.2	209	47.0	75.6	307	42.6	68.5	405	9.2	14.8	503	4.0	6.4	601	22.0	35.4
14	0.0	0.0	112	32.2	51.8	210	47.0	75.6	308	41.5	66.8	406	12.5	20.1	504	1.0	1.6	602	22.4	36.0
15	0.0	0.0	113	32.4	52.1	211	47.0	75.6	309	40.3	64.8	407	15.8	25.4	505	0.0	0.0	603	22.5	36.2
16	0.0	0.0	114	32.2	51.8	212	47.0	75.6	310	38.5	61.9	408	19.1	30.7	506	0.0	0.0	604	22.5	36.2
17	0.0	0.0	115	31.7	51.0	213	47.0	75.6	311	37.0	59.5	409	22.4	36.0	507	0.0	0.0	605	22.5	36.2
18	0.0	0.0	116	28.6	46.0	214	47.2	75.9	312	35.2	56.6	410	25.0	40.2	508	0.0	0.0	606	22.7	36.5
19	0.0	0.0	117	25.3	40.7	215	47.4	76.3	313	33.8	54.4	411	25.6	41.2	509	0.0	0.0	607	23.7	38.1
20	0.0	0.0	118	22.0	35.4	216	47.9	77.1	314	32.5	52.3	412	27.5	44.2	510	0.0	0.0	608	25.1	40.4
21	3.0	4.8	119	18.7	30.1	217	48.5	78.0	315	31.5	50.7	413	29.0	46.7	511	1.2	1.9	609	26.0	41.8
22	5.9	9.5	120	15.4	24.8	218	49.1	79.0	316	30.6	49.2	414	30.0	48.3	512	3.5	5.6	610	26.5	42.6
23	8.6	13.8	121	12.1	19.5	219	49.5	79.6	317	30.5	49.1	415	30.1	48.4	513	5.5	8.8	611	27.0	43.4
24	11.5	18.5	122	8.8	14.2	220	50.0	80.4	318	30.0	48.3	416	30.0	48.3	514	6.5	10.5	612	26.1	42.0
25	14.3	23.0	123	5.5	8.8	221	50.6	81.4	319	29.0	46.7	417	29.7	47.8	515	8.5	13.7	613	22.8	36.7
26	16.9	27.2	124	2.2	3.5	222	51.0	82.1	320	27.5	44.2	418	29.3	47.1	516	9.6	15.4	614	19.5	31.4
27	17.3	27.8	125	0.0	0.0	223	51.5	82.9	321	24.8	39.9	419	28.8	46.3	517	10.5	16.9	615	16.2	26.1
28	18.1	29.1	126	0.0	0.0	224	52.2	84.0	322	21.5	34.6	420	28.0	45.1	518	11.9	19.1	616	12.9	20.8
29	20.7	33.3	127	0.0	0.0	225	53.2	85.6	323	20.1	32.3	421	25.0	40.2	519	14.0	22.5	617	9.6	15.4
30	21.7	34.9	128	0.0	0.0	226	54.1	87.0	324	19.1	30.7	422	21.7	34.9	520	16.0	25.7	618	6.3	10.1
31	22.4	36.0	129	0.0	0.0	227	54.6	87.9	325	18.5	29.8	423	18.4	29.6	521	17.7	28.5	619	3.0	4.8
32	22.5	36.2	130	0.0	0.0	228	54.9	88.3	326	17.0	27.4	424	15.1	24.3	522	19.0	30.6	620	0.0	0.0
33	22.1	35.6	131	0.0	0.0	229	55.0	88.5	327	15.5	24.9	425	11.8	19.0	523	20.1	32.3	621	0.0	0.0
34	21.5	34.6	132	0.0	0.0	230	54.9	88.3	328	12.5	20.1	426	8.5	13.7	524	21.0	33.8	622	0.0	0.0
35	20.9	33.6	133	0.0	0.0	231	54.6	87.9	329	10.8	17.4	427	5.2	8.4	525	22.0	35.4	623	0.0	0.0
36	20.4	32.8	134	0.0	0.0	232	54.6	87.9	330	8.0	12.9	428	1.9	3.1	526	23.0	37.0	624	0.0	0.0
37	19.8	31.9	135	0.0	0.0	233	54.8	88.2	331	4.7	7.6	429	0.0	0.0	527	23.8	38.3	625	0.0	0.0
38	17.0	27.4	136	0.0	0.0	234	55.1	88.7	332	1.4	2.3	430	0.0	0.0	528	24.5	39.4	626	0.0	0.0
39	14.9	24.0	137	0.0	0.0	235	55.5	89.3	333	0.0	0.0	431	0.0	0.0	529	24.9	40.1	627	0.0	0.0
40	14.9	24.0	138	0.0	0.0	236	55.7	89.6	334	0.0	0.0	432	0.0	0.0	530	25.0	40.2	628	0.0	0.0
41	15.2	24.5	139	0.0	0.0	237	56.1	90.3	335	0.0	0.0	433	0.0	0.0	531	25.0	40.2	629	0.0	0.0
42	15.5	24.9	140	0.0	0.0	238	56.3	90.6	336	0.0	0.0	434	0.0	0.0	532	25.0	40.2	630	0.0	0.0
43	16.0	25.7	141	0.0	0.0	239	56.6	91.1	337	0.0	0.0	435	0.0	0.0	533	25.0	40.2	631	0.0	0.0
44	17.1	27.5	142	0.0	0.0	240	56.7	91.2	338	0.0	0.0	436	0.0	0.0	534	25.0	40.2	632	0.0	0.0
45	19.1	30.7	143	0.0	0.0	241	56.7	91.2	339	0.0	0.0	437	0.0	0.0	535	25.0	40.2	633	0.0	0.0
46	21.1	33.9	144	0.0	0.0	242	56.5	90.9	340	0.0	0.0	438	0.0	0.0	536	25.6	41.2	634	0.0	0.0
47	22.7	36.5	145	0.0	0.0	243	56.5	90.9	341	0.0	0.0	439	0.0	0.0	537	25.8	41.5	635	0.0	0.0
48	22.9	36.8	146	0.0	0.0	244	56.5	90.9	342	0.0	0.0	440	0.0	0.0	538	26.0	41.8	636	0.0	0.0
49	22.7	36.5	147	0.0	0.0	245	56.5	90.9	343	0.0	0.0	441	0.0	0.0	539	25.6	41.2	637	0.0	0.0

TABLE 1 - US 1972 Schedule (Continued)

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)			
50	22.6	36.4	148	0.0	0.0	246	56.5	90.9	344	0.0	0.0	442	0.0	0.0	540	25.2	40.5	638	0.0	0.0
51	21.3	34.3	149	0.0	0.0	247	56.5	90.9	345	0.0	0.0	443	0.0	0.0	541	25.0	40.2	639	0.0	0.0
52	19.0	30.6	150	0.0	0.0	248	56.4	90.7	346	0.0	0.0	444	0.0	0.0	542	25.0	40.2	640	0.0	0.0
53	17.1	27.5	151	0.0	0.0	249	56.1	90.3	347	1.0	1.6	445	0.0	0.0	543	25.0	40.2	641	0.0	0.0
54	15.8	25.4	152	0.0	0.0	250	55.8	89.8	348	4.3	6.9	446	0.0	0.0	544	24.4	39.3	642	0.0	0.0
55	15.8	25.4	153	0.0	0.0	251	55.1	88.7	349	7.6	12.2	447	0.0	0.0	545	23.1	37.2	643	0.0	0.0
56	17.7	28.5	154	0.0	0.0	252	54.6	87.9	350	10.9	17.5	448	3.3	5.3	546	19.8	31.9	644	0.0	0.0
57	19.8	31.9	155	0.0	0.0	253	54.2	87.2	351	14.2	22.8	449	6.6	10.6	547	16.5	26.5	645	0.0	0.0
58	21.6	34.8	156	0.0	0.0	254	54.0	86.9	352	17.3	27.8	450	9.9	15.9	548	13.2	21.2	646	2.0	3.2
59	23.2	37.3	157	0.0	0.0	255	53.7	86.4	353	20.0	32.2	451	13.2	11.2	549	9.9	15.9	647	4.5	7.2
60	24.2	38.9	158	0.0	0.0	256	53.6	86.2	354	22.5	36.2	452	16.5	26.5	550	6.6	10.6	648	7.8	12.6
61	24.6	39.6	159	0.0	0.0	257	53.9	86.7	355	23.7	38.1	453	19.8	31.9	551	3.3	5.3	649	10.2	16.4
62	24.9	40.1	160	0.0	0.0	258	54.0	86.9	356	25.2	40.5	454	23.1	37.2	552	0.0	0.0	650	12.5	20.1
63	25.0	40.2	161	0.0	0.0	259	54.1	87.0	357	26.6	42.8	455	26.4	42.5	553	0.0	0.0	651	14.0	22.5
64	24.6	39.6	162	0.0	0.0	260	54.1	87.0	358	28.1	45.2	456	27.8	44.7	554	0.0	0.0	652	15.3	24.6
65	24.5	39.4	163	0.0	0.0	261	53.8	86.6	359	30.0	48.3	457	29.1	46.8	555	0.0	0.0	653	17.5	28.2
66	24.7	39.7	164	3.3	5.3	262	53.4	85.9	360	30.8	49.6	458	31.5	50.7	556	0.0	0.0	654	19.6	31.5
67	24.8	39.9	165	6.6	10.6	263	53.0	85.3	361	31.6	50.8	459	33.0	53.1	557	0.0	0.0	655	21.0	33.8
68	24.7	39.7	166	9.9	15.9	264	52.6	84.6	362	32.1	51.6	460	33.6	54.1	558	0.0	0.0	656	22.2	35.7
69	24.6	39.6	167	13.2	21.2	265	52.1	83.8	363	32.8	52.8	461	34.8	56.0	559	0.0	0.0	657	23.3	37.5
70	24.6	39.6	168	16.5	26.5	266	52.4	84.3	364	33.6	54.1	462	35.1	56.5	560	0.0	0.0	658	24.5	39.4
71	25.1	40.4	169	19.8	31.9	267	52.0	83.7	365	34.5	55.5	463	35.6	57.3	561	0.0	0.0	659	25.3	40.7
72	25.6	41.2	170	22.2	35.7	268	51.9	83.5	366	34.6	55.7	464	36.1	58.1	562	0.0	0.0	660	25.6	41.2
73	25.7	41.4	171	24.3	39.1	269	51.7	83.2	367	34.9	56.2	465	36.0	57.9	563	0.0	0.0	661	26.0	41.8
74	25.4	40.9	172	25.8	41.5	270	51.5	82.9	368	34.8	56.0	466	36.1	58.1	564	0.0	0.0	662	26.1	42.0
75	24.9	40.1	173	26.4	42.5	271	51.6	83.0	369	34.5	55.5	467	36.2	58.2	565	0.0	0.0	663	26.2	42.2
76	25.0	40.2	174	25.7	41.4	272	51.8	83.3	370	34.7	55.8	468	36.0	57.9	566	0.0	0.0	664	26.2	42.2
77	25.4	40.9	175	25.1	40.4	273	52.1	83.8	371	35.5	57.1	469	35.7	57.4	567	0.0	0.0	665	26.4	42.5
78	26.0	41.8	176	24.7	39.7	274	52.5	84.5	372	36.0	57.9	470	36.0	57.9	568	0.0	0.0	666	26.5	42.6
79	26.0	41.8	177	25.0	40.2	275	53.0	85.3	373	36.0	57.9	471	36.0	57.9	569	3.3	5.3	667	26.5	42.6
80	25.7	41.4	178	25.2	40.5	276	53.5	86.1	374	36.0	57.9	472	35.6	57.3	570	6.6	10.6	668	26.0	41.8
81	26.1	42.0	179	25.4	40.9	277	54.0	86.9	375	36.0	57.9	473	35.5	57.1	571	9.9	15.9	669	25.5	41.0
82	26.7	43.0	180	25.8	41.5	278	54.9	88.3	376	36.0	57.9	474	35.4	57.0	572	13.0	20.9	670	23.6	38.0
83	27.5	44.2	181	27.2	43.8	279	55.4	89.1	377	36.0	57.9	475	35.2	56.6	573	14.6	23.5	671	21.4	34.4
84	28.6	46.0	182	26.5	42.6	280	55.6	89.5	378	36.1	58.1	476	35.2	56.6	574	16.0	25.7	672	18.5	29.8
85	29.3	47.1	183	24.0	38.6	281	56.0	90.1	379	36.4	58.6	477	35.2	56.6	575	17.0	27.4	673	16.4	26.4
86	29.8	47.9	184	22.7	36.5	282	56.0	90.1	380	36.5	58.7	478	35.2	56.6	576	17.0	27.4	674	14.5	23.3
87	30.1	48.4	185	19.4	31.2	283	55.8	89.8	381	36.4	58.6	479	35.2	56.6	577	17.0	27.4	675	11.6	18.7
88	30.4	48.9	186	17.7	28.5	284	55.2	88.8	382	36.0	57.9	480	35.2	56.6	578	17.5	28.2	676	8.7	14.0
89	30.7	49.4	187	17.2	27.7	285	54.5	87.7	383	35.1	56.5	481	35.0	56.3	579	17.7	28.5	677	5.8	9.3
90	30.7	49.4	188	18.1	29.1	286	53.6	86.2	384	34.1	54.9	482	35.1	56.5	580	17.7	28.5	678	3.5	5.6
91	30.5	49.1	189	18.6	29.9	287	52.5	84.5	385	33.5	53.9	483	35.2	56.6	581	17.5	28.2	679	2.0	3.2
92	30.4	48.8	190	20.0	32.2	288	51.5	82.9	386	31.4	50.5	484	35.5	57.1	582	17.0	27.4	680	0.0	0.0
93	30.3	48.8	191	22.2	35.7	289	51.5	82.9	387	29.0	46.7	485	35.2	56.6	583	16.9	27.2	681	0.0	0.0
94	30.4	48.9	192	24.5	39.4	290	51.5	82.9	388	25.7	41.4	486	35.0	56.3	584	16.6	26.7	682	0.0	0.0
95	30.8	49.6	193	27.3	43.9	291	51.1	82.2	389	23.0	37.0	487	35.0	56.3	585	17.0	27.4	683	0.0	0.0
96	30.4	48.9	194	30.5	49.1	292	50.1	80.6	390	20.3	32.7	488	35.0	56.3	586	17.1	27.5	684	0.0	0.0
97	29.9	48.1	195	33.5	53.9	293	50.0	80.4	391	17.5	28.2	489	34.8	56.0	587	17.0	27.4	685	0.0	0.0



TABLE 1 - US 1972 Schedule (Continued)

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)
686	0.0	0.0	784	28.9	46.5	882	28.9	46.5	1078	21.5	34.6	1176	23.0	37.0	1274	21.8	35.1	1304	28.0	45.1
687	0.0	0.0	785	28.9	46.5	883	28.5	45.9	1079	20.6	33.1	1177	23.5	37.8	1275	22.2	35.7	1305	24.7	39.7
688	0.0	0.0	786	28.8	46.3	884	28.1	45.2	1080	18.0	29.0	1178	23.0	37.0	1276	23.0	37.0	1306	21.4	34.4
689	0.0	0.0	787	28.5	45.9	885	28.0	45.1	1081	15.0	24.1	1179	22.5	36.2	1277	23.6	38.0	1307	18.1	29.1
690	0.0	0.0	788	28.3	45.5	886	28.0	45.1	1082	12.1	19.8	1180	20.0	32.2	1278	24.1	38.8	1308	14.8	23.8
691	0.0	0.0	789	28.3	45.5	887	27.6	44.4	1083	11.1	17.9	1181	16.7	26.9	1279	24.5	39.4	1309	11.5	18.5
692	0.0	0.0	790	28.3	45.5	888	27.2	43.8	1084	10.6	17.1	1182	13.4	21.6	1280	24.5	39.4	1310	8.2	13.2
693	0.0	0.0	791	28.2	45.4	889	26.6	42.8	1085	10.0	16.1	1183	10.1	16.3	1281	24.0	38.6	1311	4.9	7.9
694	1.4	2.3	792	27.6	44.4	890	27.0	43.4	1086	9.5	15.3	1184	6.8	10.9	1282	23.5	37.8	1312	1.6	2.6
695	3.3	5.3	793	27.5	44.2	891	27.5	44.2	1087	9.1	14.6	1185	3.5	5.6	1283	23.5	37.8	1313	0.0	0.0
696	4.4	7.1	794	27.5	44.2	892	27.8	44.7	1088	8.7	14.0	1186	0.2	0.3	1284	23.5	37.8	1314	0.0	0.0
697	6.5	10.5	795	27.5	44.2	893	28.0	45.1	1089	8.6	13.8	1187	0.0	0.0	1285	23.5	37.8	1315	0.0	0.0
698	9.2	14.8	796	27.5	44.2	894	27.8	44.7	1090	8.0	14.2	1188	0.0	0.0	1286	23.5	37.8	1316	0.0	0.0
699	11.3	18.2	797	27.5	44.2	895	28.0	45.1	1091	9.0	14.5	1189	0.0	0.0	1287	23.5	37.8	1317	0.0	0.0
700	13.5	21.7	798	27.5	44.2	896	28.0	45.1	1092	8.7	14.0	1190	0.0	0.0	1288	24.0	38.6	1318	0.0	0.0
701	14.6	23.5	799	27.6	44.4	897	28.0	45.1	1093	8.6	13.8	1191	0.0	0.0	1289	24.1	38.8	1319	0.0	0.0
702	16.4	26.4	800	28.0	45.1	898	27.7	44.6	1094	8.0	12.9	1192	0.0	0.0	1290	24.5	39.4	1320	0.0	0.0
703	16.7	26.9	801	28.5	45.9	899	27.4	44.1	1095	7.0	11.3	1193	0.0	0.0	1291	24.7	39.7	1321	0.0	0.0
704	16.5	26.5	802	30.0	48.3	900	26.9	43.3	1096	5.0	8.0	1194	0.0	0.0	1292	25.0	40.2	1322	0.0	0.0
705	16.5	26.5	803	31.0	49.9	901	26.6	42.8	1097	4.2	6.8	1195	0.0	0.0	1293	25.4	40.9	1323	0.0	0.0
706	18.2	29.3	804	32.0	51.5	902	26.5	42.6	1098	2.6	4.2	1196	0.0	0.0	1294	25.6	41.2	1304	28.0	45.1
707	19.2	30.9	805	33.0	53.1	903	26.5	42.6	1099	1.0	1.6	1197	0.2	0.3	1295	25.7	41.4	1305	24.7	39.7
708	20.1	32.3	806	33.0	53.1	904	26.5	42.6	1100	0.0	0.0	1198	0.0	0.0	1296	26.0	41.8	1306	21.4	34.4
709	21.5	34.6	807	33.6	54.1	905	26.3	42.3	1101	0.1	0.2	1199	3.5	5.6	1297	26.2	42.2	1307	18.1	29.1
710	22.5	36.2	808	34.0	54.7	906	26.2	42.2	1102	0.6	1.0	1200	6.5	10.5	1298	27.0	43.4	1308	14.8	23.8
711	22.5	36.2	809	34.3	55.2	907	26.2	42.2	1103	1.6	2.6	1201	9.8	15.8	1299	27.8	44.7	1309	11.5	18.5
712	22.1	35.6	810	34.2	55.0	908	25.9	41.7	1104	3.6	5.8	1202	12.0	19.3	1300	28.3	45.5	1310	8.2	13.2
713	22.7	36.5	811	34.0	54.7	909	25.6	41.2	1105	6.9	11.1	1203	12.9	20.8	1301	29.0	46.7	1311	4.9	7.9
714	23.3	37.5	812	34.0	54.7	910	25.6	41.2	1106	10.0	16.1	1204	13.0	20.9	1302	29.1	46.8	1312	1.6	2.6
715	23.5	37.8	813	33.9	54.5	911	25.9	41.7	1107	12.8	20.6	1205	12.6	20.3	1303	29.0	46.7	1313	0.0	0.0
716	22.5	36.2	814	33.6	54.1	912	25.8	41.5	1108	14.0	22.5	1206	12.8	20.6	1304	28.0	45.1	1314	0.0	0.0
717	21.6	34.8	815	33.1	53.3	913	25.5	41.0	1109	14.5	23.3	1207	13.1	21.1	1305	24.7	39.7	1315	0.0	0.0
718	20.5	33.0	816	33.0	53.1	914	24.6	39.6	1110	16.0	25.7	1208	13.1	21.1	1306	21.4	34.4	1316	0.0	0.0
719	18.0	29.0	817	32.5	52.3	915	23.5	37.8	1111	18.1	29.1	1209	14.0	22.5	1307	18.1	29.1	1317	0.0	0.0
720	15.0	24.1	818	32.0	51.5	916	22.2	35.7	1112	20.0	32.2	1210	15.5	24.9	1308	14.8	23.8	1318	0.0	0.0
721	12.0	19.3	819	31.9	51.3	917	21.6	34.8	1113	21.0	33.8	1211	17.0	27.4	1309	11.5	18.5	1319	0.0	0.0
722	9.0	14.5	820	31.6	50.8	918	21.6	34.8	1114	21.2	34.1	1212	18.6	29.9	1310	8.2	13.2	1320	0.0	0.0
723	6.2	10.0	821	31.5	50.7	919	21.7	34.9	1115	21.3	34.3	1213	19.7	31.7	1311	4.9	7.9	1321	0.0	0.0
724	4.5	7.2	822	30.6	49.2	920	22.6	36.4	1116	21.4	34.4	1214	21.0	33.8	1312	1.6	2.6	1322	0.0	0.0
725	3.0	4.8	823	30.0	49.3	921	23.4	37.7	1117	21.7	34.9	1215	21.5	34.6	1313	0.0	0.0	1323	0.0	0.0
726	2.1	3.4	824	29.9	48.1	922	24.0	38.6	1118	22.5	36.2	1216	21.8	35.1	1314	0.0	0.0	1314	0.0	0.0
727	0.5	0.8	825	29.9	48.1	923	24.2	38.9	1119	23.0	37.0	1217	21.8	35.1	1315	0.0	0.0	1315	0.0	0.0
728	0.5	0.8	826	29.9	48.1	924	24.4	39.3	1120	23.8	38.3	1218	21.5	34.6	1316	0.0	0.0	1316	0.0	0.0
729	3.2	5.1	827	29.9	48.1	925	24.9	40.1	1121	24.5	39.4	1219	21.2	34.1	1317	0.0	0.0	1317	0.0	0.0
730	6.5	10.5	828	29.6	47.6	926	25.1	40.4	1122	25.0	40.2	1220	21.5	34.6	1318	0.0	0.0	1318	0.0	0.0
731	9.6	15.4	829	29.5	47.5	927	25.2	40.5	1123	24.9	40.1	1221	21.8	35.1	1319	0.0	0.0	1319	0.0	0.0
732	12.5	20.1	830	29.5	47.5	928	25.3	40.7	1124	24.8	39.9	1222	22.0	35.4	1320	0.0	0.0	1320	0.0	0.0
733	14.0	22.5	831	29.3	47.1	929	25.5	41.0	1125	25.0	40.2	1223	21.9	35.2	1321	0.0	0.0	1321	0.0	0.0
734	16.0	25.7	832	28.9	46.5	930	25.2	40.5	1126	25.4	40.9	1224	21.7	34.9	1322	0.0	0.0	1322	0.0	0.0
735	18.0	29.0	833	28.2	45.4	931	25.0	40.2	1127	25.8	41.5	1225	21.5	34.6	1323	0.0	0.0	1323	0.0	0.0



TABLE 1 - US 1972 Schedule (Continued)

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	
736	19.6	31.5	834	27.7	44.6	932	25.0	40.2	1030	0.0	0.0	1128	26.0	41.8	1226	21.5	34.6	1324	0.0	0.0	
737	21.5	34.6	835	27.0	43.4	933	25.0	40.2	1031	0.0	0.0	1129	26.4	42.5	1227	21.4	34.4	1325	0.0	0.0	
738	23.1	37.2	836	25.5	41.0	934	24.7	39.7	1032	0.0	0.0	1130	26.6	42.8	1228	20.1	32.3	1326	0.0	0.0	
739	24.5	39.4	837	23.7	38.1	935	24.5	39.4	1033	0.0	0.0	1131	26.9	43.3	1229	19.5	31.4	1327	0.0	0.0	
740	25.5	41.0	838	22.0	35.4	936	24.3	39.1	1034	0.0	0.0	1132	27.0	43.4	1230	19.2	30.9	1328	0.0	0.0	
741	26.5	42.6	839	20.5	33.0	937	24.3	39.1	1035	0.0	0.0	1133	27.0	43.4	1231	19.6	31.5	1329	0.0	0.0	
742	27.1	43.6	840	19.2	30.9	938	24.5	39.4	1036	0.0	0.0	1134	27.0	43.4	1232	19.8	31.9	1330	0.0	0.0	
743	27.6	44.4	841	19.2	30.9	939	25.0	40.2	1037	0.0	0.0	1135	26.9	43.3	1233	20.0	32.2	1331	0.0	0.0	
744	27.9	44.9	842	20.1	32.3	940	25.0	40.2	1038	0.0	0.0	1136	26.8	43.1	1234	19.5	31.4	1332	0.0	0.0	
745	28.3	45.5	843	20.9	33.6	941	24.6	39.6	1039	0.0	0.0	1137	26.8	43.1	1235	17.5	28.2	1333	0.0	0.0	
746	28.6	46.0	844	21.4	34.4	942	24.6	39.6	1040	0.0	0.0	1138	26.5	42.6	1236	15.5	24.9	1334	0.0	0.0	
747	28.6	46.0	845	22.0	35.4	943	24.1	38.8	1041	0.0	0.0	1139	26.4	42.5	1237	13.0	20.9	1335	0.0	0.0	
748	28.3	45.5	846	22.6	36.4	944	24.5	39.4	1042	0.0	0.0	1140	26.0	41.8	1238	10.0	16.1	1336	0.0	0.0	
749	28.2	45.4	847	23.2	37.3	945	25.1	40.4	1043	0.0	0.0	1141	25.5	41.0	1239	8.0	12.9	1337	0.0	0.0	
750	28.0	45.1	848	24.0	38.6	946	25.6	41.2	1044	0.0	0.0	1142	24.6	39.6	1240	6.0	9.7	1338	1.5	2.4	
751	27.5	44.2	849	25.0	40.2	947	25.1	40.4	1045	0.0	0.0	1143	23.5	37.1	1241	4.0	6.4	1339	4.8	7.7	
752	26.8	43.1	850	26.0	41.8	948	24.0	38.6	1046	0.0	0.0	1144	21.5	34.6	1242	2.5	4.0	1340	8.1	13.0	
753	25.5	41.0	851	26.6	42.8	949	22.0	35.4	1047	0.0	0.0	1145	20.0	32.2	1243	0.7	1.1	1341	11.4	18.3	
754	23.5	37.8	852	26.6	42.8	950	20.1	32.3	1048	0.0	0.0	1146	17.5	28.2	1244	0.0	0.0	1342	13.2	21.2	
755	21.5	34.6	853	26.8	43.1	951	16.9	27.2	1049	0.0	0.0	1147	16.0	25.7	1245	0.0	0.0	1343	15.1	24.3	
756	19.0	30.6	854	27.0	43.4	952	13.6	21.9	1050	0.0	0.0	1148	14.0	22.5	1246	0.0	0.0	1344	16.8	27.0	
757	16.5	26.5	855	27.2	43.8	953	10.3	16.6	1051	0.0	0.0	1149	10.7	17.2	1247	0.0	0.0	1345	18.3	29.4	
758	14.9	24.0	856	27.8	44.7	954	7.0	11.3	1052	0.0	0.0	1150	7.4	11.9	1248	0.0	0.0	1346	19.5	31.4	
759	12.5	20.1	857	28.1	45.2	955	3.7	6.0	1053	1.2	1.9	1151	4.1	6.6	1249	0.0	0.0	1347	20.3	32.7	
760	9.4	15.1	858	28.8	46.3	956	0.4	0.6	1054	0.0	0.0	1152	0.8	1.3	1250	0.0	0.0	1348	21.3	34.3	
761	6.2	10.0	859	28.9	46.5	957	0.0	0.0	1055	7.3	11.7	1153	0.0	0.0	1251	0.0	0.0	1349	21.9	35.2	
762	3.0	4.8	860	29.0	46.7	958	0.0	0.0	1056	10.6	17.1	1154	0.0	0.0	1252	1.0	1.6	1350	22.1	35.6	
763	1.5	2.4	861	29.1	46.8	959	0.0	0.0	1057	13.9	22.4	1155	0.0	0.0	1253	1.0	1.6	1351	22.4	35.6	
764	1.5	2.4	862	29.0	46.7	960	2.0	3.2	1058	17.0	27.4	1156	0.0	0.0	1254	1.0	1.6	1352	22.0	35.4	
765	0.5	0.8	863	28.1	45.2	961	5.3	8.5	1059	18.5	29.8	1157	0.0	0.0	1255	1.0	1.6	1353	21.6	34.8	
766	0.0	0.0	864	27.5	44.2	962	8.6	13.8	1060	20.0	32.2	1158	0.0	0.0	1256	1.0	1.6	1354	21.1	33.9	
767	3.0	4.8	865	27.0	43.4	963	11.9	19.1	1061	21.8	35.1	1159	0.0	0.0	1257	1.6	2.6	1355	20.5	33.0	
768	6.3	10.1	866	25.8	41.5	964	15.2	24.5	1062	23.0	37.0	1160	0.0	0.0	1258	3.0	4.8	1356	20.0	32.2	
769	9.6	15.4	867	25.0	40.2	965	17.5	28.2	1063	24.0	38.6	1161	0.0	0.0	1259	4.0	6.4	1357	19.6	31.5	
770	12.9	20.8	868	24.5	39.4	966	18.6	29.9	1064	24.8	39.9	1162	0.0	0.0	1260	5.0	8.0	1358	18.5	29.8	
771	15.8	25.4	869	24.8	39.9	967	20.0	32.2	1065	25.6	41.2	1163	0.0	0.0	1261	6.3	10.1	1359	17.5	28.2	
772	17.5	28.2	870	25.1	40.4	968	21.1	33.9	1066	26.5	42.6	1164	0.0	0.0	1262	8.0	12.9	1360	16.5	26.5	
773	18.4	29.6	871	25.5	41.0	969	22.0	35.4	1067	26.8	43.1	1165	0.0	0.0	1263	10.0	16.1	1361	15.5	24.9	
774	19.5	31.4	872	25.7	41.4	970	23.0	37.0	1068	27.4	44.1	1166	0.0	0.0	1264	10.5	16.9	1362	14.0	22.5	
775	20.7	33.3	873	26.2	42.2	971	24.5	39.4	1069	27.9	44.9	1167	0.0	0.0	1265	9.5	15.3	1363	11.0	17.7	
776	22.0	35.4	874	26.9	43.3	972	26.3	42.3	1070	28.3	45.5	1168	0.0	0.0	1266	8.5	13.7	1364	8.0	12.9	
777	23.2	37.3	875	27.5	44.2	973	27.5	44.2	1071	28.0	45.1	1169	2.1	3.4	1267	7.6	12.2	1365	5.2	8.4	
778	25.0	40.2	876	27.8	44.7	974	28.1	45.2	1072	27.5	44.2	1170	5.4	8.7	1268	8.8	14.2	1366	2.5	4.0	
779	26.5	42.6	877	28.4	45.7	975	28.4	45.7	1073	27.0	43.4	1171	8.7	14.0	1269	11.0	17.7	1367	0.0	0.0	
780	27.5	44.2	878	29.0	46.7	976	28.5	45.9	1074	27.0	43.4	1172	12.0	19.3	1270	14.0	22.5	1368	0.0	0.0	
781	28.0	45.1	879	29.2	47.0	977	28.5	45.9	1075	26.3	42.3	1173	15.3	24.6	1271	17.0	27.4	1369	0.0	0.0	
782	28.3	45.5	880	29.1	46.8	978	28.5	45.9	1076	24.5	39.4	1174	18.6	29.9	1272	19.5	31.4	1370	0.0	0.0	
783	28.9	46.5	881	29.0	46.7	979	27.7	44.6	1077	22.5	36.2	1175	21.1	33.9	1273	21.0	33.8	1371	0.0	0.0	
																			1372	0.0	0.0



TABLE 2 - Highway Fuel Economy Test Schedule

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)
0	0.0	0.0	90	46.3	74.5	180	43.1	69.4	270	46.7	75.2	360	57.4	92.4	450	58.2	93.7
1	0.0	0.0	91	46.2	74.4	181	42.2	67.9	271	46.2	74.4	361	57.2	92.1	451	58.1	93.5
2	0.0	0.0	92	46.3	74.5	182	41.5	66.8	272	46.0	74.0	362	57.1	91.9	452	58.0	93.3
3	2.0	3.2	93	46.5	74.8	183	41.5	66.8	273	45.8	73.7	363	57.0	91.7	453	58.0	93.3
4	4.9	7.9	94	46.9	75.5	184	42.1	67.8	274	45.6	73.4	364	57.0	91.7	454	58.0	93.3
5	8.1	13.0	95	47.1	75.8	185	42.9	69.0	275	45.4	73.1	365	56.9	91.6	455	58.0	93.3
6	11.3	18.2	96	47.4	76.3	186	43.5	70.0	276	45.2	72.7	366	56.9	91.6	456	58.0	93.3
7	14.5	23.3	97	47.7	76.8	187	43.9	70.7	277	45.0	72.4	367	56.9	91.6	457	58.0	93.3
8	17.3	27.8	98	48.0	77.2	188	43.6	70.2	278	44.7	71.9	368	57.0	91.7	458	57.9	93.2
9	19.6	31.5	99	48.2	77.6	189	43.3	69.7	279	44.5	71.6	369	57.0	91.7	459	57.9	93.2
10	21.8	35.1	100	48.5	78.1	190	43.0	69.2	280	44.2	71.1	370	57.0	91.7	460	58.0	93.3
11	24.0	38.6	101	48.8	78.5	191	43.1	69.4	281	43.5	70.0	371	57.0	91.7	461	58.1	93.5
12	25.8	41.5	102	49.1	79.0	192	43.4	69.8	282	42.8	68.9	372	57.0	91.7	462	58.1	93.5
13	27.1	43.6	103	49.2	79.2	193	43.9	70.7	283	42.0	67.6	373	57.0	91.7	463	58.2	93.7
14	28.8	45.1	104	49.1	79.0	194	44.3	71.3	284	40.1	64.5	374	57.0	91.7	464	58.3	93.8
15	29.9	46.7	105	49.1	79.0	195	44.6	71.8	285	38.6	62.1	375	57.0	91.7	465	58.3	93.8
16	30.0	48.3	106	49.0	78.9	196	44.9	72.3	286	37.5	60.4	376	57.0	91.7	466	58.3	93.8
17	30.7	49.4	107	49.0	78.9	197	44.8	72.1	287	35.8	57.6	377	56.9	91.6	467	58.2	93.7
18	31.5	50.7	108	49.1	79.0	198	44.4	71.5	288	34.7	55.8	378	56.8	91.4	468	58.1	93.5
19	32.2	51.8	109	49.2	79.2	199	43.9	70.7	289	34.0	54.7	379	56.5	90.9	469	58.0	93.3
20	32.9	52.9	110	49.3	79.3	200	43.4	69.8	290	33.3	53.6	380	56.2	90.4	470	57.8	93.0
21	33.5	53.9	111	49.4	79.5	201	43.2	69.5	291	32.5	52.3	381	56.0	90.1	471	57.5	92.5
22	34.1	54.9	112	49.5	79.7	202	43.2	69.5	292	31.7	51.0	382	56.0	90.1	472	57.1	91.9
23	34.6	55.7	113	49.5	79.7	203	43.1	69.4	293	30.6	49.2	383	56.0	90.1	473	57.0	91.7
24	34.9	56.2	114	49.5	79.7	204	43.0	69.2	294	29.6	47.6	384	56.1	90.3	474	56.6	91.1
25	35.1	56.5	115	49.4	79.5	205	43.0	69.2	295	28.8	46.3	385	56.4	90.8	475	56.1	90.3
26	35.7	57.5	116	49.1	79.0	206	43.1	69.4	296	28.4	45.7	386	56.7	91.2	476	56.0	90.1
27	35.9	57.8	117	48.9	78.7	207	43.4	69.8	297	28.6	46.0	387	56.9	91.6	477	55.8	89.8
28	35.8	57.6	118	48.6	78.2	208	43.9	70.7	298	29.5	47.5	388	57.1	91.6	478	55.5	89.3
29	35.3	56.8	119	48.4	77.9	209	44.0	70.8	299	31.4	50.5	389	57.3	92.2	479	55.2	88.8
30	34.9	56.2	120	48.1	77.4	210	43.5	70.0	300	33.4	53.8	390	57.4	92.4	480	55.1	88.7
31	34.5	55.5	121	47.7	76.8	211	42.6	68.6	301	35.6	57.3	391	57.4	92.4	481	55.0	88.5
32	34.6	55.7	122	47.4	76.3	212	41.5	66.8	302	37.5	60.4	392	57.2	92.1	482	54.9	88.4
33	34.8	56.0	123	47.3	76.1	213	40.7	65.5	303	39.1	62.9	393	57.0	91.7	483	54.9	88.4
34	35.1	56.5	124	47.5	76.4	214	40.0	64.4	304	40.2	64.7	394	56.9	91.6	484	54.9	88.4
35	35.7	57.5	125	47.8	76.9	215	40.0	64.4	305	41.1	66.1	395	56.6	91.1	485	54.9	88.4
36	36.6	58.1	126	47.9	77.1	216	40.3	64.9	306	41.8	67.3	396	56.3	90.6	486	54.9	88.4
37	36.2	58.3	127	48.0	77.2	217	41.0	66.0	307	42.4	68.2	397	56.4	90.3	487	54.9	88.4
38	36.5	58.7	128	47.9	77.1	218	42.0	67.6	308	42.8	68.9	398	56.4	90.8	488	55.0	88.5
39	36.7	59.1	129	47.9	77.1	219	42.7	68.7	309	43.3	69.7	399	56.7	91.2	489	55.0	88.5
40	36.9	59.4	130	47.9	77.1	220	43.1	69.4	310	43.8	70.5	400	57.1	91.9	490	55.0	88.5
41	37.0	59.5	131	48.0	77.2	221	43.2	69.5	311	44.3	71.3	401	57.5	92.5	491	55.0	88.5
42	37.0	59.5	132	48.0	77.2	222	43.4	69.8	312	44.7	71.9	402	57.8	93.0	492	55.0	88.5
43	37.0	59.5	133	48.0	77.2	223	43.9	70.7	313	45.0	72.4	403	58.0	93.3	493	55.0	88.5
44	37.0	59.5	134	47.9	77.1	224	44.3	71.3	314	45.2	72.7	404	58.0	93.3	494	55.1	88.7
45	37.0	59.5	135	47.3	76.1	225	44.7	71.9	315	45.4	73.1	405	58.0	93.3	495	55.1	88.7
46	37.0	59.5	136	46.0	74.0	226	45.1	72.6	316	45.5	73.2	406	58.0	93.3	496	55.0	88.5
47	37.1	59.7	137	43.3	69.7	227	45.4	73.1	317	45.8	73.7	407	58.0	93.3	497	54.9	88.4
48	37.3	60.0	138	41.2	66.3	228	45.8	73.7	318	46.0	74.0	408	58.0	93.3	498	54.9	88.4
49	37.8	60.8	139	39.5	63.6	229	46.5	74.8	319	46.1	74.2	409	57.9	93.2	499	54.8	88.2

TABLE 2 - Highway Fuel Economy Test Schedule (Continued)

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)
50	38.6	62.1	140	39.2	63.1	230	46.9	75.5	320	46.5	74.8	410	57.8	93.0
51	39.3	63.2	141	39.0	62.8	231	47.2	76.0	321	46.8	75.3	411	57.7	92.9
52	40.0	64.4	142	39.0	62.8	232	47.4	76.3	322	47.1	75.8	412	57.8	93.0
53	40.7	65.5	143	39.1	62.9	233	47.3	76.1	323	47.7	76.8	413	57.8	93.0
54	41.4	66.6	144	39.5	63.6	234	47.3	76.1	324	48.3	77.7	414	57.9	93.2
55	42.2	67.9	145	40.1	64.5	235	47.2	76.0	325	49.0	78.9	415	58.0	93.3
56	42.9	69.0	146	41.0	66.0	236	47.2	76.0	326	49.7	80.0	416	58.1	93.5
57	43.5	70.0	147	42.0	67.6	237	47.2	76.0	327	50.3	81.0	417	58.4	94.0
58	44.0	70.8	148	43.1	69.4	238	47.1	75.8	328	51.0	82.1	418	58.9	94.8
59	44.3	71.3	149	43.7	70.3	239	47.0	75.6	329	51.7	83.2	419	59.1	95.1
60	44.5	71.6	150	44.1	71.0	240	47.0	75.6	330	52.4	84.3	420	59.4	95.6
61	44.8	72.1	151	44.3	71.3	241	46.9	75.5	331	53.1	85.5	421	59.8	96.2
62	44.9	72.3	152	44.4	71.5	242	46.8	75.3	332	53.8	86.6	422	59.9	96.4
63	45.0	72.4	153	44.6	71.8	243	46.9	75.5	333	54.5	87.7	423	59.9	96.4
64	45.1	72.6	154	44.7	71.9	244	47.0	75.6	334	55.2	88.8	424	59.8	96.2
65	45.4	73.1	155	44.9	72.3	245	47.2	76.0	335	55.8	89.8	425	59.6	95.9
66	45.7	73.5	156	45.2	72.7	246	47.5	76.4	336	56.4	90.8	426	59.4	95.6
67	46.0	74.0	157	45.7	73.5	247	47.9	77.1	337	56.9	91.6	427	59.2	95.3
68	46.3	74.5	158	45.9	73.9	248	48.0	77.2	338	57.0	91.9	428	59.1	95.1
69	46.5	74.8	159	46.3	74.5	249	48.0	77.2	339	57.1	91.9	429	59.0	95.0
70	46.8	75.3	160	46.8	75.3	250	48.0	77.2	340	57.3	92.2	430	58.9	94.8
71	46.9	75.5	161	46.9	75.5	251	48.0	77.2	341	57.6	92.7	431	58.7	94.5
72	47.0	75.6	162	47.0	75.6	252	48.0	77.2	342	57.8	93.0	432	58.6	94.3
73	47.1	75.8	163	47.1	75.8	253	48.1	77.4	343	58.0	93.3	433	58.5	94.1
74	47.2	76.0	164	47.6	76.6	254	48.2	77.6	344	58.1	93.5	434	58.4	94.0
75	47.3	76.1	165	47.9	77.1	255	48.2	77.6	345	58.4	94.0	435	58.4	94.0
76	47.2	76.0	166	48.0	77.2	256	48.1	77.4	346	58.7	94.5	436	58.3	93.8
77	47.1	75.8	167	48.0	77.2	257	48.6	78.2	347	58.8	94.6	437	58.2	93.7
78	47.0	75.6	168	47.9	77.1	258	48.9	78.7	348	58.9	94.8	438	58.1	93.5
79	46.9	75.5	169	47.8	76.9	259	49.1	79.0	349	59.0	95.0	439	58.0	93.3
80	46.9	75.5	170	47.3	76.1	260	49.1	79.0	350	59.0	95.0	440	57.9	93.2
81	46.9	75.5	171	46.7	75.2	261	49.1	79.0	351	58.9	94.8	441	57.9	93.2
82	47.0	75.6	172	46.2	74.4	262	49.1	79.0	352	58.8	94.6	442	57.9	93.2
83	47.1	75.8	173	45.9	73.9	263	49.1	79.0	353	58.6	94.3	443	57.9	93.2
84	47.1	75.8	174	45.7	73.5	264	49.0	78.9	354	58.4	94.0	444	57.9	93.2
85	47.2	76.0	175	45.5	73.2	265	48.9	78.7	355	58.2	93.7	445	58.0	93.3
86	47.1	75.8	176	45.5	73.1	266	48.9	78.7	356	58.1	93.5	446	58.1	93.5
87	47.0	75.6	177	45.3	72.9	267	47.7	76.8	357	58.0	93.3	447	58.1	93.5
88	46.9	75.5	178	45.0	72.4	268	47.5	76.4	358	57.9	93.2	448	58.2	93.7
89	46.5	74.8	179	44.0	70.8	269	47.2	76.0	359	57.6	92.7	449	58.2	93.7



TABLE 2 - Highway Fuel Economy Test Schedule (Continued)

Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)	Time (s)	Speed (mph)	Speed (km/h)
540	56.0	90.1	580	51.1	82.2	620	49.7	80.0	660	51.0	82.1	700	54.2	87.2	740	48.5	78.1
541	56.0	90.1	581	50.7	81.6	621	50.6	81.4	661	51.1	82.2	701	54.5	87.7	741	47.6	76.6
542	56.0	90.1	582	50.3	81.0	622	51.5	82.9	662	51.4	82.7	702	54.8	88.2	742	46.8	75.3
543	56.0	90.1	583	49.8	80.1	623	52.2	84.0	663	51.7	83.2	703	55.0	88.5	743	45.6	73.4
544	56.0	90.1	584	49.3	79.3	624	52.7	84.8	664	52.0	83.7	704	55.5	89.3	744	44.2	71.1
545	56.0	90.1	585	48.7	78.4	625	53.0	85.3	665	52.2	84.0	705	55.9	90.0	745	42.5	68.4
546	56.0	90.1	586	48.2	77.6	626	53.6	86.3	666	52.5	84.5	706	56.1	90.3	746	39.2	63.1
547	55.9	90.0	587	48.1	77.4	627	54.0	86.9	667	52.8	85.0	707	56.3	90.6	747	35.9	57.8
548	55.9	90.0	588	48.0	77.2	628	54.1	87.1	668	52.7	84.8	708	56.4	90.8	748	32.6	52.5
549	55.9	90.0	589	48.0	77.2	629	54.4	87.5	669	52.6	84.7	709	56.5	90.9	749	29.3	47.2
550	55.8	89.8	590	48.1	77.4	630	54.7	88.0	670	52.3	84.2	710	56.7	91.2	750	26.8	43.1
551	55.6	89.5	591	48.4	77.9	631	55.1	88.7	671	52.3	84.2	711	56.9	91.6	751	24.5	39.4
552	55.4	89.2	592	48.9	78.7	632	55.4	89.2	672	52.4	84.3	712	57.0	91.7	752	21.5	34.6
553	55.2	88.8	593	49.0	78.9	633	55.4	89.2	673	52.5	84.5	713	57.3	92.2	753	19.5	31.4
554	55.1	88.7	594	49.1	79.0	634	55.0	88.5	674	52.7	84.8	714	57.7	92.9	754	17.4	28.0
555	55.0	88.5	595	49.1	79.0	635	54.5	87.7	675	52.7	84.8	715	58.2	93.7	755	15.1	24.3
556	54.9	88.4	596	49.0	78.9	636	53.6	86.3	676	52.4	84.3	716	58.8	94.6	756	12.4	20.0
557	54.6	87.9	597	49.0	78.9	637	52.5	84.5	677	52.1	83.8	717	59.1	95.1	757	9.7	15.6
558	54.4	87.5	598	48.9	78.7	638	50.2	80.8	678	51.7	83.2	718	59.2	95.3	758	7.0	11.3
559	54.2	87.2	599	48.6	78.2	639	48.2	77.6	679	51.1	82.2	719	59.1	95.1	759	5.0	8.0
560	54.1	87.1	600	48.3	77.7	640	46.5	74.8	680	50.5	81.3	720	58.8	94.6	760	3.3	5.3
561	53.8	86.6	601	48.0	77.2	641	46.2	74.4	681	50.1	80.6	721	58.5	94.1	761	2.0	3.2
562	53.4	85.9	602	47.9	77.1	642	46.0	74.0	682	49.8	80.1	722	58.1	93.5	762	0.7	1.1
563	53.3	85.8	603	47.8	76.9	643	46.0	74.0	683	49.7	80.0	723	57.7	92.9	763	0.0	0.0
564	53.1	85.5	604	47.7	76.8	644	46.3	74.5	684	49.6	79.8	724	57.3	92.2	764	0.0	0.0
565	52.9	85.1	605	47.9	77.1	645	46.8	75.3	685	49.5	79.7	725	57.1	91.9	765	0.0	0.0
566	52.6	84.7	606	48.3	77.7	646	47.5	76.4	686	49.5	79.7	726	56.8	91.4			
567	52.4	84.3	607	49.0	78.9	647	48.2	77.6	687	49.7	80.0	727	56.5	90.9			
568	52.2	84.0	608	49.1	79.0	648	48.8	78.5	688	50.0	80.5	728	56.2	90.4			
569	52.1	83.8	609	49.0	78.9	649	49.5	79.7	689	50.2	80.8	729	55.5	89.3			
570	52.0	83.7	610	48.9	78.7	650	50.2	80.8	690	50.6	81.4	730	54.6	87.9			
571	52.0	83.7	611	48.0	77.2	651	50.7	81.6	691	51.1	82.2	731	54.1	87.1			
572	52.0	83.7	612	47.1	75.8	652	51.1	82.2	692	51.6	83.0	732	53.7	86.4			
573	52.0	83.7	613	46.2	74.4	653	51.7	83.2	693	51.9	83.5	733	53.2	85.6			
574	52.1	83.8	614	46.1	74.2	654	52.2	84.0	694	52.0	83.7	734	52.9	85.1			
575	52.0	83.7	615	46.1	74.2	655	52.5	84.5	695	52.1	83.8	735	52.5	84.5			
576	52.0	83.7	616	46.2	74.4	656	52.1	83.8	696	52.1	83.8	736	52.0	83.7			
577	51.9	83.5	617	46.9	75.5	657	51.6	83.0	697	52.9	85.1	737	51.3	82.6			
578	51.6	83.0	618	47.8	76.9	658	51.1	82.2	698	53.3	85.8	738	50.5	81.3			
579	51.4	82.7	619	49.0	78.9	659	51.0	82.1	699	53.7	86.4	739	49.5	79.7			

TABLE 3A - ECE R15.04 Schedule - Manual Transmission

Time (s)	Speed (mph)	Speed (km/h)									
0	.0	.0	49	.0	.0	98	.0	.0	147	31.1	50.0
1	.0	.0	50	1.9	3.0	99	.0	.0	148	31.1	50.0
2	.0	.0	51	3.7	6.0	100	.0	.0	149	31.1	50.0
3	.0	.0	52	5.6	9.0	101	.0	.0	150	31.1	50.0
4	.0	.0	53	7.5	12.0	102	.0	.0	151	31.1	50.0
5	.0	.0	54	9.3	15.0	103	.0	.0	152	31.1	50.0
6	.0	.0	55	9.3	15.0	104	.0	.0	153	31.1	50.0
7	.0	.0	56	9.3	15.0	105	.0	.0	154	31.1	50.0
8	.0	.0	57	11.4	18.4	106	.0	.0	155	31.1	50.0
9	.0	.0	58	13.5	21.8	107	.0	.0	156	29.9	48.1
10	.0	.0	59	15.7	25.2	108	.0	.0	157	28.7	46.3
11	.0	.0	60	17.8	28.6	109	.0	.0	158	27.6	44.4
12	2.3	3.8	61	19.9	32.0	110	.0	.0	159	26.4	42.5
13	4.7	7.5	62	19.9	32.0	111	.0	.0	160	25.2	40.6
14	7.0	11.3	63	19.9	32.0	112	.0	.0	161	24.1	38.8
15	9.3	15.0	64	19.9	32.0	113	.0	.0	162	22.9	36.9
16	9.3	15.0	65	19.9	32.0	114	.0	.0	163	21.7	35.0
17	9.3	15.0	66	19.9	32.0	115	.0	.0	164	21.7	35.0
18	9.3	15.0	67	19.9	32.0	116	.0	.0	165	21.7	35.0
19	9.3	15.0	68	19.9	32.0	117	.0	.0	166	21.7	35.0
20	9.3	15.0	69	19.9	32.0	118	1.9	3.0	167	21.7	35.0
21	9.3	15.0	70	19.9	32.0	119	3.7	6.0	168	21.7	35.0
22	9.3	15.0	71	19.9	32.0	120	5.6	9.0	169	21.7	35.0
23	9.3	15.0	72	19.9	32.0	121	7.5	12.0	170	21.7	35.0
24	7.8	12.5	73	19.9	32.0	122	9.3	15.0	171	21.7	35.0
25	6.2	10.0	74	19.9	32.0	123	9.3	15.0	172	21.7	35.0
26	4.1	6.7	75	19.9	32.0	124	9.3	15.0	173	21.7	35.0
27	2.1	3.3	76	19.9	32.0	125	10.7	17.2	174	21.7	35.0
28	.0	.0	77	19.9	32.0	126	12.1	19.4	175	21.7	35.0
29	.0	.0	78	19.9	32.0	127	13.5	21.7	176	21.7	35.0
30	.0	.0	79	19.9	32.0	128	14.8	23.9	177	20.8	33.5
31	.0	.0	80	19.9	32.0	129	16.2	26.1	178	19.9	32.0
32	.0	.0	81	19.9	32.0	130	17.6	28.3	179	17.9	28.9
33	.0	.0	82	19.9	32.0	131	19.0	30.6	180	16.0	25.7
34	.0	.0	83	19.9	32.0	132	20.4	32.8	181	14.0	22.6
35	.0	.0	84	19.9	32.0	133	21.7	35.0	182	12.1	19.4
36	.0	.0	85	19.9	32.0	134	21.7	35.0	183	10.1	16.3
37	.0	.0	86	18.2	29.3	135	21.7	35.0	184	8.2	13.1
38	.0	.0	87	16.5	26.5	136	22.9	36.9	185	6.2	10.0
39	.0	.0	88	14.8	23.8	137	24.1	38.8	186	4.1	6.7
40	.0	.0	89	13.0	21.0	138	25.2	40.6	187	2.1	3.3
41	.0	.0	90	11.3	18.3	139	26.4	42.5	188	.0	.0
42	.0	.0	91	9.6	15.5	140	27.6	44.4	189	.0	.0
43	.0	.0	92	7.9	12.8	141	28.7	46.3	190	.0	.0
44	.0	.0	93	6.2	10.0	142	29.9	48.1	191	.0	.0
45	.0	.0	94	4.1	6.7	143	31.1	50.0	192	.0	.0
46	.0	.0	95	2.1	3.3	144	31.1	50.0	193	.0	.0
47	.0	.0	96	.0	.0	145	31.1	50.0	194	.0	.0
48	.0	.0	97	.0	.0	146	31.1	50.0	195	.0	.0

TABLE 3B - ECE R15.04 Schedule - Automatic Transmission

Time (s)	Speed (mph)	Speed (km/h)									
0	.0	.0	49	.0	.0	98	.0	.0	147	31.1	50.0
1	.0	.0	50	1.7	2.7	99	.0	.0	148	31.1	50.0
2	.0	.0	51	3.3	5.3	100	.0	.0	149	31.1	50.0
3	.0	.0	52	5.0	8.0	101	.0	.0	150	31.1	50.0
4	.0	.0	53	6.6	10.7	102	.0	.0	151	31.1	50.0
5	.0	.0	54	8.3	13.3	103	.0	.0	152	31.1	50.0
6	.0	.0	55	9.9	16.0	104	.0	.0	153	31.1	50.0
7	.0	.0	56	11.6	18.7	105	.0	.0	154	31.1	50.0
8	.0	.0	57	13.3	21.3	106	.0	.0	155	31.1	50.0
9	.0	.0	58	14.9	24.0	107	.0	.0	156	29.9	48.1
10	.0	.0	59	16.6	26.7	108	.0	.0	157	28.7	46.3
11	.0	.0	60	18.2	29.3	109	.0	.0	158	27.6	44.4
12	2.3	3.8	61	19.9	32.0	110	.0	.0	159	26.4	42.5
13	4.7	7.5	62	19.9	32.0	111	.0	.0	160	25.2	40.6
14	7.0	11.3	63	19.9	32.0	112	.0	.0	161	24.1	38.8
15	9.3	15.0	64	19.9	32.0	113	.0	.0	162	22.9	36.9
16	9.3	15.0	65	19.9	32.0	114	.0	.0	163	21.7	35.0
17	9.3	15.0	66	19.9	32.0	115	.0	.0	164	21.7	35.0
18	9.3	15.0	67	19.9	32.0	116	.0	.0	165	21.7	35.0
19	9.3	15.0	68	19.9	32.0	117	.0	.0	166	21.7	35.0
20	9.3	15.0	69	19.9	32.0	118	1.2	1.9	167	21.7	35.0
21	9.3	15.0	70	19.9	32.0	119	2.4	3.8	168	21.7	35.0
22	9.3	15.0	71	19.9	32.0	120	3.6	5.8	169	21.7	35.0
23	9.3	15.0	72	19.9	32.0	121	4.8	7.7	170	21.7	35.0
24	7.5	12.0	73	19.9	32.0	122	6.0	9.6	171	21.7	35.0
25	5.6	9.0	74	19.9	32.0	123	7.2	11.5	172	21.7	35.0
26	5.7	6.0	75	19.9	32.0	124	8.4	13.5	173	21.7	35.0
27	1.9	3.0	76	19.9	32.0	125	9.6	15.4	174	21.7	35.0
28	.0	.0	77	19.9	32.0	126	10.8	17.3	175	21.7	35.0
29	.0	.0	78	19.9	32.0	127	11.9	19.2	176	21.7	35.0
30	.0	.0	79	19.9	32.0	128	13.1	21.2	177	19.9	32.1
31	.0	.0	80	19.9	32.0	129	14.3	23.1	178	18.1	29.2
32	.0	.0	81	19.9	32.0	130	15.5	25.0	179	16.3	26.3
33	.0	.0	82	19.9	32.0	131	16.7	26.9	180	14.5	23.3
34	.0	.0	83	19.9	32.0	132	17.9	28.8	181	12.7	20.4
35	.0	.0	84	19.9	32.0	133	19.1	30.8	182	10.9	17.5
36	.0	.0	85	19.9	32.0	134	20.3	32.7	183	9.1	14.6
37	.0	.0	86	18.1	29.1	135	21.5	34.6	184	7.2	11.7
38	.0	.0	87	16.3	26.2	136	22.7	36.5	185	5.4	8.8
39	.0	.0	88	14.5	23.3	137	23.9	38.5	186	3.6	5.8
40	.0	.0	89	12.7	20.4	138	25.1	40.4	187	1.8	2.9
41	.0	.0	90	10.8	17.5	139	26.3	42.3	188	.0	.0
42	.0	.0	91	9.0	14.5	140	27.5	44.2	189	.0	.0
43	.0	.0	92	7.2	11.6	141	28.7	46.2	190	.0	.0
44	.0	.0	93	5.4	8.7	142	29.9	48.1	191	.0	.0
45	.0	.0	94	3.6	5.8	143	31.1	50.0	192	.0	.0
46	.0	.0	95	1.8	2.9	144	31.1	50.0	193	.0	.0
47	.0	.0	96	.0	.0	145	31.1	50.0	194	.0	.0
48	.0	.0	97	.0	.0	146	31.1	50.0	195	.0	.0