or once the auxiliary power unit turns on, in the case of a hybrid electric vehicle, the accumulated mileage and energy usage of the vehicle from the point where electricity is introduced from the electrical outlet shall be recorded, and the vehicle shall be brought to an immediate stop, thereby concluding the All-Electric Range Test.

(4) Regenerative braking. Regenerative braking systems may be utilized during the range test. The braking level, if adjustable, shall be set according to the manufacturer’s specifications prior to the commencement of the test. The driving schedule speed and time tolerances specified in paragraph (a)(2) of this section shall not be exceeded due to the operation of the regenerative braking system.

(b) [Reserved]


§ 86.1772–99 Road load power, test weight, and inertia weight class determination.

(a) The provisions of §86.113 apply to this subpart, with the following exceptions and additions.

(1) For light-duty vehicles and light-duty trucks, gasoline having the specifications listed below may be used in exhaust emission testing as an option to the specifications in §86.113(a)(1). If a manufacturer elects to utilize this option, exhaust emission testing shall be conducted by the manufacturer with gasoline having the specifications listed in the table in this paragraph (a)(1), and the Administrator shall conduct exhaust emission testing with gasoline having the specifications listed in the table in this paragraph (a)(1). Specifications for non-gasoline fuels and all fuel property test methods are contained in Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996). These procedures are incorporated by reference (see §86.1). The table follows:

<table>
<thead>
<tr>
<th>Fuel property</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octane, (R+M)/2 (min)</td>
<td>91.</td>
</tr>
<tr>
<td>Sensitivity (min)</td>
<td>7.5</td>
</tr>
<tr>
<td>Lead, g/gal (max) (No lead added)</td>
<td>0–0.01</td>
</tr>
<tr>
<td>Distillation Range, °F</td>
<td>130–150</td>
</tr>
<tr>
<td>10 ppt. point,</td>
<td>130–150</td>
</tr>
<tr>
<td>50 ppt. point,</td>
<td>200–210</td>
</tr>
<tr>
<td>Copper Corrosion</td>
<td>No. 1</td>
</tr>
<tr>
<td>Gum, Washed, mg/100 ml (max).</td>
<td>3.0</td>
</tr>
<tr>
<td>Oxidation Stability, minutes (min).</td>
<td>1,000</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>Heat of Combustion</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>Carbon, wt %</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>Hydrogen, wt %</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>RVP, psi</td>
<td>6.7–7.0</td>
</tr>
<tr>
<td>Olefins, vol %</td>
<td>4.0–6.0</td>
</tr>
<tr>
<td>Total Aromatic Hydrocarbons, vol %</td>
<td>22–25</td>
</tr>
<tr>
<td>Benzene, vol %</td>
<td>0.8–1.0</td>
</tr>
<tr>
<td>Multi-Substituted Ally Aromatic Hydrocarbons, vol %</td>
<td>12–14.</td>
</tr>
<tr>
<td>MTBE, vol %</td>
<td>10.8–11.2</td>
</tr>
<tr>
<td>Additives</td>
<td>See Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996). These procedures are incorporated by reference (see §86.1).</td>
</tr>
<tr>
<td>Copper Corrosion</td>
<td>No. 1</td>
</tr>
<tr>
<td>Gum, Washed, mg/100 ml (max).</td>
<td>3.0</td>
</tr>
<tr>
<td>Oxidation Stability, minutes (min).</td>
<td>1,000</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>Heat of Combustion</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>Carbon, wt %</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>Hydrogen, wt %</td>
<td>No limit; report to purchaser required.</td>
</tr>
<tr>
<td>RVP, psi</td>
<td>6.7–7.0</td>
</tr>
<tr>
<td>Olefins, vol %</td>
<td>4.0–6.0</td>
</tr>
<tr>
<td>Total Aromatic Hydrocarbons, vol %</td>
<td>22–25</td>
</tr>
<tr>
<td>Benzene, vol %</td>
<td>0.8–1.0</td>
</tr>
<tr>
<td>Multi-Substituted Ally Aromatic Hydrocarbons, vol %</td>
<td>12–14.</td>
</tr>
<tr>
<td>MTBE, vol %</td>
<td>10.8–11.2</td>
</tr>
<tr>
<td>Additives</td>
<td>See Chapter 4 of the California Regulatory Requirements Applicable to the National Low Emission Vehicle Program (October, 1996). These procedures are incorporated by reference (see §86.1).</td>
</tr>
</tbody>
</table>

(b) [Reserved]

profile test sequence with the air conditioning set to the “NORMAL” air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed over the time period needed to perform the test sequence, and converting this value into units of horsepower. Vehicles equipped with automatic temperature controlled air conditioning systems shall be operated in “AUTOMATIC” temperature and fan modes with the system set at 72 deg. F.

The running loss test fuel tank temperature profile test sequence is found in §86.129(d).

(2) [Reserved]


§ 86.1773–99 Test sequence; general requirements.

(a) The provisions of §86.130 apply to this subpart.

(b) The following additional requirements shall also apply to this subpart:

(1) For purposes of determining conformity with 50 °F test requirements, the procedures set forth in paragraph (c) of this section shall apply. For all hybrid electric vehicles and all 1995 and subsequent model-year vehicles certifying to running loss and useful life evaporative emission standards, the test sequence specified in subpart B of this part shall apply.

(2) [Reserved]

(c)(1) Following a 12 to 36 hour cold soak at a nominal temperature of 50 °F, emissions of CO and NOₓ measured on the Federal Test Procedure (subpart B of this part), conducted at a nominal test temperature of 50 °F, shall not exceed the standards for vehicles of the same emission category and vehicle type subject to a cold soak and emission test at 68 to 86 °F. For all TLEV’s, evaporative emission test in a fueling area maintained within a temperature range of 68 to 86 °F. The preconditioning shall be conducted at a nominal temperature of 50 °F. The requirement to saturate the evaporative control canister(s) shall not apply.

(i) If a soak area remote from the test site is used, the vehicle may pass through an area maintained within a temperature range of 68 to 86 °F during a time interval not to exceed 10 minutes. In such cases, the vehicle shall be restabilized to 50 °F by soaking the vehicle in the nominal 50 °F test area for six times as long as the exposure time to the higher temperature area, prior to starting the emission test.

(ii) The vehicle shall be approxi-

mately level during all phases of the test sequence to prevent abnormal fuel distribution.

(2) Manufacturers shall demonstrate compliance with this requirement each year by testing at least three LDV or LDT emission data and/or engineering development vehicles (with at least 4000 miles) which are representative of the array of technologies available in that model year. Only TLEVs, LEVs, and ULEVs are to be considered for testing at 50 °F. It is not necessary to apply deterioration factors (DFs) to