§ 86.1735–01
composition, i.e., combustion chamber
design, cylinder head material, cam-
shaft profile, computer modifications,
turbocharger, intercooler wastegate
characteristics, and transmission or
torque converter specifications. The
manufacturer is required to update and
submit to the Administrator the “sup-
plemental data sheet” for all running
changes and field fixes implemented
with the change notification. The man-
fufacturer shall submit, on a monthly
basis, by engine family, a list of run-
ning changes/field fixes giving the doc-
ument number date submitted and a
brief description of the change.

(b) [Reserved]

§ 86.1735–99 Labeling.
The following requirements shall
apply to TLEVs, LEVs, ULEVs, and
ZEVs certified under the provisions of
this subpart:

(a) The requirements in §86.1807–01
and subsequent model year provisions
do not apply to this section.

(b) The requirements in Chapter 7 of
the California Regulatory Require-
ments Applicable to the National Low
Emission Vehicle Program (October,
1996) shall apply. These requirements
are incorporated by reference (see
§ 86.1).

§ 86.1736–99—86.1769–99 [Reserved]

§ 86.1770–99 All-Electric Range Test re-
quirements.

(a) ZEVs and Type A and Type B hy-
brid electric vehicles shall be subject
to the All-Electric Range Test speci-
fied below for the purpose of deter-
mining the energy efficiency and oper-
ating range of a ZEV or of a hybrid
electric vehicle operating without the
use of its auxiliary power unit. For hy-
brid electric vehicles, the manufac-
turer may elect to conduct the All-
Electric Range Test prior to vehicle
preconditioning in the exhaust and
evaporative emission test sequence
specified in subpart B of this part.

(1) Cold soak. The vehicle shall be
stored at an ambient temperature not
less than 68 °F (20 °C) and not more
than 86 °F (30 °C) for 12 to 36 hours.
During this time, the vehicle’s battery
shall be charged to a full state-of-
charge.

(2) Driving schedule—(i) Determina-
tion of All-Electric Range—Highway.
At the end of the cold soak period, the vehicle
shall be placed, either driven or
pushed, onto a dynamometer and oper-
ated through an Urban Dynamometer
Driving Schedule, found in 40 CFR part
86, appendix I, until the vehicle is no
longer able to maintain within 5 miles
per hour of the speed requirements or
within 2 seconds of the time require-
ments of the driving schedule. For hy-
brid electric vehicles, this determina-
tion shall be performed without the use
of the auxiliary power unit.

(ii) Determination of All-Electric
Range—Urban. At the end of the cold
soak period, the vehicle shall be
placed, either driven or pushed, onto a
dynamometer and operated through a
Highway Fuel Economy Driving Sched-
ule, found in 40 CFR part 600, appendix
I, until the vehicle is no longer able to
maintain within 5 miles per hour of the
speed requirements or within 2 seconds of the time require-
ments of the driving schedule. For hybrid electric vehicles,
this determination shall be performed without the use of the auxiliary power
unit.

(3) Recording requirements. Once the
vehicle is no longer able to maintain
the speed and time requirements speci-
fied in paragraph (a)(2) of this section,
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]


§ 86.1771–99 Fuel specifications.

(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).

<table>
<thead>
<tr>
<th>Fuel property Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octane, (R+M)/2 (min)</td>
</tr>
<tr>
<td>Sensitivity (min)</td>
</tr>
<tr>
<td>Lead, g/gal (max) (No lead added)</td>
</tr>
<tr>
<td>Distillation Range, °F</td>
</tr>
<tr>
<td>10 pt. point</td>
</tr>
</tbody>
</table>

(2) [Reserved]

(b) [Reserved]


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

(a) The provisions of §86.129 apply to this subpart.

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

(1) For electric and hybrid electric vehicle lines where it is expected that more than 33 percent of a vehicle line will be equipped with air conditioning, per §86.096–24(g)(2) or §86.1832–01(a) as applicable, that derives power from the battery pack, the road load shall be increased by the incremental horsepower required to operate the air conditioning unit. The incremental increase shall be determined by recording the difference in energy required for a hybrid electric vehicle under all-electric power to complete the running loss test fuel tank temperature profile test sequence without air conditioning and the same vehicle tested over the running loss test fuel tank temperature