

Suggested ZEV Application Format for Certification

<u>Section No.</u>	<u>Title</u>
01.00.00	Communications
.01.00	Mailing Information
.01	Certification Information
.02	Responsible official
02.00.00	Confidential Information
.01.00	Statement of confidentiality
.02.00	Test vehicle selection
	"Worst case" test vehicle selection and manufacturer defined criteria if more than one model offered (e.g. 2-door vs 4-door).
.03.00	Projected California annual model-year sales
03.00.00	Facilities, equipment, and test procedures (Manufacturers to keep information regarding facilities and equipment on file.)
.01.00	(Reserved)
.02.00	Battery pre-conditioning procedures (if necessary)
04.00.00	(Reserved)
05.00.00	(Reserved)
06.00.00	Maintenance
.01.00	Test vehicle scheduled maintenance
.02.00	Recommended customer maintenance schedule
.03.00	Lubricants and heater fuels, if any
07.00.00	Vehicle Emission Control Information (VECI) and Environmental Performance (EP) Labels
.01.00	VECI Label locations
.02.00	Sample VECI labels
.03.00	Sample EP label (Formerly called the Smog Index label)
.04.00	Statement of compliance

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<u>Section No.</u>	<u>Title</u>
08.00.00	General technical description (Manufacturer's sales brochures or owner's manual may be submitted to satisfy the requirements in this section.)
.01.00	Description of Propulsion System
.02.00	Description of Motor(s)
.03.00	Description of Batteries
.01	Battery charging capacity
.02	Self-discharge information
.03	Description of thermal management system
.04	Definition of end-of-life
.05	Description of battery disposal plan
.04.00	Description of Controller/Inverter
.05.00	Description of Transmission
.06.00	Description of climate control system
.01	Electric Heat Pump
.02	(Reserved)
.03	Climate control system logic
.04	(Reserved)
.07.00	Description of Regenerative Braking System
.01	Control logic
.02	Percentage of braking performed on road by each axle
.08.00	Description of charger
.01	Proper recharging procedures
.02	Power requirements necessary to recharge vehicle
.09.00	Accessories which draw energy from the batteries
.10.00	Other unique features (e.g. solar panels)
.11.00	Description of warning system(s) for maintenance / malfunction
.01	Cut off terminal voltages for prevention of battery damage
09.00.00	(Reserved)
10.00.00	(Reserved)
11.00.00	Starting and shifting schedules
12.00.00 through 16.00.00	(Reserved)

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<u>Section No.</u>	<u>Title</u>
17.00.00	California requirements
.01.00	Statement of compliance
.01	General statement
.02	Driveability statement
.02.00	Supplemental Data and Certification Review Sheets
.03.00	(Reserved)
.04.00	Credits
.01	Description of multi-manufacturer arrangements
.02	Credit calculation
.05.00	Vehicle Safety
.01	All information for safe operation of vehicle
.02	Information on safe handling of battery system
.03	Description of emergency procedures
.06.00	(Reserved)

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E.O.#. _____ Page _____

MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: _____ Test Group: _____

Vehicle Class(es): PC _____, LDT1 (0-3750 lbs. LVW) _____, LDT2 (≥ 3,751 lbs. LVW) _____,
MDV6 (8,500-10,000 lbs. GVW) _____, MDV7 (10,001-14,000 lbs. GVW) _____

ZEV Type: NEV _____, ZEV _____

No. of ZEV Credits per vehicle: _____

Fuel Type: Electro-chemical Battery _____, Fuel Cell _____, Capacitor _____, Other (specify) _____

Battery Type(s): Lead Acid _____ Nickel Cadmium _____ SBLA _____ Sodium Sulfur _____
Sodium Nickel Chloride _____ Nickel Metal Hydride _____ Lithium Metal Disulfide _____
Zinc Air _____ Zinc Bromine _____ Lithium Polymer _____, Lithium Ion _____,
Other (specify): _____

Total Battery Weight (kg.): _____ Total Battery Volume (liters): _____

No. of batteries or modules per vehicle: _____ Total Battery Voltage: _____

Charger(s): On-board _____ Off-board _____ Conductive _____ Inductive _____.

Drive Motors(s): AC Induction _____ DC Brush _____ DC Brushless _____
Switched Reluctance _____ Other (specify): _____.

No. of Drive Motors _____ Rated motor power _____ @ _____ rpm Max rpm: _____.

Drive: FWD _____ RWD _____ 4WD-FT _____ 4WD-PT _____

Regenerative Braking: No _____ Yes _____ FW _____ RW _____ AW _____.

Driver Controlled Regen Braking: Yes _____ No _____ Coast Regen Braking: Yes _____ No _____.

Air Conditioning: Yes _____ No _____, Fuel Fired Heater:¹ Yes _____ No _____

Vehicle Make & Models (If coded, see attachments)	Trans type M5, A4 (If applicable)	GVWR	Curb Weight	ETW or Test Weight	DPA / RLHP or Dyno Coeff. a=, b=, c=

Date Issued: _____

Revisions: _____

¹ Fuel fired heaters are not allowed in pure ZEVs for model year 2009 and subsequently.

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MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: _____ Test Group: _____

Range Test Results							
Vehicle ID	Trans	(check one) ____ TW ____ ETW	(check one) ____ DPA ____ RLHP Or dyno coeff.	City Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
				Hwy. Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)

Battery Test Results: Specific Energy: Wh/kg _____

Remarks:

Date Issued: Revisions:

----- **ARB USE ONLY** -----

Application:
Processed By: _____ Date: _____ Reviewed by: _____ Date: _____