(Page 1 of 2)

State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-15-320 Relating to Certification of New Motor Vehicles

NISSAN MOTOR CO., LTD.

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1998 model-year Nissan Motor Co., Ltd. new pure electric motor vehicles are certified as described below for passenger cars:

Emission Standard Category: Zero-Emission Vehicle (ZEV)

Fuel Type: Battery-Stored Electricity

Engine Family: WNSXV0000GLA

Battery Type: Lithium Ion

Vehicle Model: Altra EV

BE IT FURTHER RESOLVED: That because the listed vehicle models are powered by battery-stored electricity and have no on-board systems which consume any fuel other than electricity, the vehicles produce zero exhaust or evaporative emissions of any criteria pollutant (or precursor pollutant) and therefore qualify as ZEVs according to Title 13, California Code of Regulations, Section 1960.1(g)(1), note (2.1); the listed vehicle models also meet the definition of "low-emission motor vehicle" set forth in Health and Safety Code Sections 39037.05 and 43800.

BE IT FURTHER RESOLVED: That the listed vehicle models have demonstrated, based on the specific energy of the battery, to qualify for and shall be granted 2.8 ZEV placement credits for purposes of paragraph I.D.2. of the Memorandum of Agreement between the manufacturer and the Air Resources Board.

BE IT FURTHER RESOLVED: That to the extent that the manufacturer exceeds its obligation to place new ZEVs with advanced technology batteries into service in California urban areas pursuant to said Memorandum of Agreement, the listed vehicle models have demonstrated, based on the vehicle range or on the specific energy of the battery, to qualify for and shall be granted three ZEV credits for purposes of Title 13, California Code of Regulations, Section 1960.1(g)(2), note (9)a.

BE IT FURTHER RESOLVED: That the listed vehicle models shall not be equipped with any fuel-fired auxiliary power sources or heaters.

BE IT FURTHER RESOLVED: That the listed vehicle models shall comply with the "California Motor Vehicle Emission Control and Smog Index Label Specifications" (Title 13, California Code of Regulations, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models shall be clearly labeled as "low-emission motor vehicles" pursuant to the requirements of Health and Safety Code Section 43802(a).

BE IT FURTHER RESOLVED: That because the vehicles certified by this executive order have no parts that affect emissions for which there is an applicable emission requirement, the manufacturer is not required to provide an emission control system warranty pursuant to Health and Safety Code Section 43205 or Title 13, California Code of Regulations, Sections 2035 et seq.

Quarterly production reports shall be submitted to the Executive Officer no later than 45 days after the end of each quarter.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order.

R. B. Summerfield, Chief

Mobile Source Operations Division

agn. 19, 1990 9.491m MISSHW KGD WWW WKAANK

No. 1330 CONFIDENTIAL

Supplemental Data Sheet 17.06.00

1998 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: NISSAN I	MOTOR CO., LI	D. Engine	Family : WN	SXV0000GLA	
Veh Class(es): PC X LDT1_LDT2 MDV1_MDV2_MDV3_ MDV4_MDV5_					
No. of ZEV Credits per v	ehicle: <u>2.77</u>	Ŋ	٠		
Fuel Type : Electro chemi	ical Battery X	Fuel Cell _	Capacitor_	Other(specify)	_
Battery Type(s): Lead A	cid Nickel	Cadmium_	SBLA	Sodium Sulfur	
Sodium Nickel Chlorid	ie Nickel N	Metal Hydrid	leLithi	um Metal Disulfide	_
Zinc Air Zinc B	romine L	ithium polyı	nerOth	er(specify) <u>Lithium Ion</u>	<u>n_</u>
Total Battery Weight 386	0.7 kg Total Bar	tery Volume	2.82 ш2		
Battery specific energy de	nsity <u>83.0 Wh/l</u>	Kg.			
No. of batteries or modules per vehicle 12 Total Battery Voltage 345 v (Rated)					
Charger(s): on-board off-board X conductive inductive X					
Drive Motors(s): AC Induction DC Brush DC Brushless					
Switched Reluctance Other(specify) AC Synchronous					
No. of Drive Motors 1 Rated motor power 62 KW @ 3720~8500 rpm Max rpm 13100					
Drive: FWD_X RWD 4WD-FT 4WD-PT					
Regenerative Braking: No Yes _X FW _X RW AW					
Driver Controlled Regen B	raking: Yes	No X C	oast Regen Br	aking: Yes X No	
Air Conditioning : Yes X	No				
Fuel Fired Heater, (NA)	Fuel Type : Gas_	Diesel	CNG	_ LNG	
LPG Other(specif	y) Ra	ited Heat Po	wer kW	•	
Vehicle Models	Trans, type M5, A4	GVWR	ETW	DPA or	
(if coded see attachment)	• .		Test Weight	RLHP	
Altra-EV	NA	4579	4000	RL=A+B'V ² *1	

*I A=36.09 B'=0.032969

Issue Date : 10/09/97 Revision Date : 1/01/09/98