File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-332-1
Relating to Certification of New Motor Vehicles

GLOBAL ELECTRIC MOTORCARS, LLC

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 1999 model-year Global Electric MotorCars, LLC 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

Battery Type: Lead Acid

Engine Family: XGEMV0000001

Vehicle Models: E 580; E 825; E 825/4; E 825 Utility

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 been demonstrated, based on the vehicle range capabilities or on the specific energy of the battery, to qualify for and shall be granted one ZEV credit pursuant to Title 13, California Code of Regulations, Section 1960.1(g)(2), note (9)a.

BE IT FURTHER RESOLVED: That the listed vehicles 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.

Executed at El Monte, California this 15th day of March 1999.

R. B. Summerfield, Chief
Mobile Source Operations Division

1999 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET ZEV–PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

EO# A-332-1
Pg. 1 of 2

Manufacturer: Global Electric MotorCars, LLC Engine Family: XGEMV0000001

Veh Class(es): PC X LDT1__ LDT2__ MDV1__ MDV2__ MDV3__ MDV4__ MDV5__

No. of ZEV Credits per vehicle: 1

Fuel Type: Electro chemical Battery X Fuel Cell__ Capacitor__ Other(specify)____

Battery Type(s): Lead Acid X Nickel Cadmium__ SBLA__ Sodium Sulfur__
Sodium Nickel Chloride__ Nickel Metal Hydride__ Lithium Metal Disulfide__
Zinc Air__ Zinc Bromine__ Lithium polymer__ Other(specify):____

Total Battery Weight 220 Total Battery Volume: 3538 Battery specific energy: 87AH@c/3

No. of batteries or modules per vehicle: 4 Total Battery Voltage: 48 volt

Charger(s): on-board X off-board__ conductive__ inductive__

Drive Motors(s): AC Induction__ DC Brush__ DC Brushless__
Switched Reluctance__ Other(specify):____

No. of Drive Motors 1 Rated motor power 2.6HP @ 3700 rpm Max rpm: 5000

Drive: FWD X RWD__ 4WD-FT__ 4WD-PT__

Regenerative Braking: No X Yes__ FW__ RW__ AW__

Driver Controlled Regen Braking: Yes__ X Coast Regen Braking: Yes__ No X

Air Conditioning: Yes__ No X

Fuel Fired Heater: Fuel Type: Gas__ Diesel__ CNG__ LNG__
LPG__ Other(specify):____ Rated Heat Power:____kW

Vehicle Models (M coded see attachment)	Trans. type M5, A4 (If applicable)	GVWR	Curb Weight	GTW or Test Weight	DPA or RLHP
E 580	NA	1450 lbs.	840 lbs.	1125 lbs.	

Date Issued:

Revisions:

1999 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET ZEV–PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

EO#A-332-1
Pg. 2 of 2

Manufacturer: Global Electric MotorCars, LLC Engine Family: XGEMV0000001

Veh Class(es): PC X LDT1 __ LDT2 __ MDV1 __ MDV2 __ MDV3 __ MDV4 __ MDV5 __

No. of ZEV Credits per vehicle: 1

Fuel Type: Electro chemical Battery X Fuel Cell __ Capacitor __ Other(specify) __

Battery Type(s): Lead Acid X Nickel Cadmium __ SBLA __ Sodium Sulfur __
Sodium Nickel Chloride __ Nickel Metal Hydride __ Lithium Metal Disulfide __
Zinc Air __ Zinc Bromine __ Lithium polymer __ Other(specify): __

Total Battery Weight: 330 Total Battery Volume: 5292 Battery specific energy: 87AHec/3

No. of batteries or modules per vehicle: 6 Total Battery Voltage: 72 volts

Charger(s): on-board X off-board __ conductive __ inductive __

Drive Motors(s): AC Induction __ DC Brush X DC Brushless __
Switched Reluctance __ Other(specify): __

No. of Drive Motors 1 Rated motor power 3.5 @ 4500 rpm Max rpm: 5000

Drive: FWD X RWD __ 4WD-PT __ 4WD-PT __

Regenerative Braking: No __ Yes X FW X RW __ AW __

Driver Controlled Regen Braking: Yes __ No X Coast Regen Braking: Yes X No __

Air Conditioning: Yes __ No X

Fuel Fired Heater: Fuel Type: Gas __ Diesel __ CNG __ LNG __
LPG __ Other(specify): __ Heat Power: __ kW

Vehicle Models (If coded see attachment)	Trans. type A3, A4 (If applicable)	GVWR	Curb Weight	GTW or Test Weight	DPA or RLHP
E 825/4	NA	2100 lbs.	1280 lbs.	1625 lbs.	
E 825	NA	1540 lbs.	980 lbs.		
E 825 Utility	NA	1850 lbs.	980 lbs.		

Date issued:

Revisions:

RECEIVED DATE : 11/13/98 15:25 FROM :626 575 6685