trell

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-325-5
Relating to Certification of New Motor Vehicles

GFI CONTROL SYSTEMS, INC.

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 GFI Control Systems, Inc. 1997 model-year exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Dual-Fuel Compressed Natural Gas (CNG) or Gasoline

Engine Family: VG92.0VJG2EK Displacement: 2.0 Liters (121 Cubic Inches)

Emission Control Systems & Special Features:

Three Way Catalytic Converter
Heated Oxygen Sensors (two)
Exhaust Gas Recirculation
Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are: (The standards in parentheses are for gasoline.)

Miles	Non-Methane Organic Gases	Carbon Monoxide	Nitrogen Oxides	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.125 (0.25)	3.4 (3.4)	0.4 (0.4)	0.015 (0.015)	n/a (10.0)
100,000	0.156 (0.31)	4.2 (4.2)	0.6 (0.6)	0.018 (0.018)	n/a

The CNG certification exhaust emission values set forth for non-methane organic gases (NMOG) reflect application of a reactivity adjustment factor (RAF) for CNG-fueled passenger car TLEVs, and the addition of the product of the methane exhaust emission value and a RAF for methane emission of CNG-fueled passenger car TLEVs.

Reactivity Adjustment Factor for NMOG Mass Emission: 1.00

Reactivity Adjustment Factor for Methane Mass Emission: 0.0043

The certification exhaust emission values for this engine family in grams per mile are: (The values in parentheses are for gasoline.)

Miles	Non-Methane Organic Gases	Carbon Monoxide	Nitrogen Oxides	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.068 (0.10)	2.7 (1.5)	0.4 (0.1)	0.013 (0.001)	n/a (5.3)
100,000	0.077 (0.12)	3.7 (2.0)	0.5 (0.2)	0.014 (0.001)	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles" pursuant to provisions in the said standards and test procedures applicable to small-volume manufacturers.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

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

BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty vehicles and Engines").

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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 and attachment.

Executed at El Monte, California this 23rd day of July 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O # A-325-5

1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Page 1

Manufacturer: GEI CONTROL SYSTEMS INC Exh Engine Family: VG920VJG2EK

Evap Std: 50K____ Useful Life with R/L___ Evap Engine Family: VFM1045AYPAB

Exh Std: Tier-0____ Tier-1___ TLEV X LEV___ ULEV____ ZEV____ ; EPA Tier-0____ Tier-1___

Veh Class(es): PC X LDT1____ LDT2____ MDV1____ MDV2____ MDV3____ MDV4____ MDV5____

Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)

Exh Cert Fuel(s): Indo X Ph2____ Diesel: 13 CCR 2282___ or 40 CFR 86.113-90___ or -94___

M85____ CNG X LPG___ Other (specify)____

Fuel Type(s): Dedicated___ Flex-Fuel___ Dual-Fuel X Gasoline X Diesel___ M85___

CNG X LNG___ LPG___ Other (specify)____

Hybrid: Type A___ B___ C___, APU Cycle (e.g., Otto, Diesel, Turbine)____

Engine Configuration: I-4 Displacement: 2.0 Liters 121 Cubic Inches

Engine: Front X Mid____ Rear____ Drive: FWD X RWD____ 4WD-FT____ 4WD-PT____

Exhaust ECS (eg., EGR, MFI, TC, CAC): HO2 S(2), TWC, SFI, EGR

(use abbreviations per SAE J1930 SEP91)

Engine Code (CA/49ST /50ST	Vehicle Models	Trans. Type: A-Auto M-Man.	ETW	DPA	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
7-04N	Contour P.C.	A	3500	6.3	V9-160	948F--BA	94BB--FK

Date Issued: 3/22/'95

Revisions: