

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-325-13  
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. 1999 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 (Indolene)

Engine Family: XG9XV02.0VOC Displacement: 2.0 Liters (121 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

- Three Way Catalytic Converter
- Heated Oxygen Sensors (two)
- 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.)

<u>Miles</u>	<u>Non-Methane Organic Gases</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
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.)

<u>Miles</u>	<u>Non-Methane Organic Gases</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Formaldehyde</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.040 (0.07)	2.0 (2.4)	0.2 (0.2)	0.0004 (0.0002)	n/a (4.9)
100,000	0.048 (0.08)	2.4 (3.3)	0.2 (0.2)	0.0005 (0.0002)	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent 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 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 and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

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 19<sup>th</sup> day of November 1998.



R. B. Summerfield, Chief  
Mobile Source Operations Division

**Air Resources Board Supplemental Data Sheet**  
**Passenger Cars, Light Duty Trucks and Medium Duty Vehicles** ED# A-325-13  
**Model Year 1999**

Manufacturer: GFI CONTROL SYSTEMS INC Exh Eng Fam: XG9XV02.0VOC EvapFam: XFMXRO115BBE  
 All Engine Codes in Engine Family: CA X 49s     50s     AB965    , ORVR: Yes     No X  
 Exh Std: CA Tier-1     TLEV X LEV     ULEV     SULEV    , US EPA Tier-1      
 Veh Class(es): PC X LDT1     LDT2     MDV1     MDV2     MDV3     MDV4     MDV5      
 Single Cert Standard for Multi-Class Eng Family: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)  
 Fuel Type(s): Dedicated     Flex Fuel     Dual Fuel X Bi-Fuel     Gasoline X Diesel      
                   CNG X LNG     LPG     M85     Other (specify)      
 Exh Emiss Test Fuel(s): Indo X CBG     CNG X LPG     M85     Other (specify)      
                           Diesel: 13 CCR 2282     40 CFR 86.113-90     40 CFR 86.113-90      
 Evaporative Emissions Test Procedure: California X Federal     *CNE: Assigned d/s*  
 Service Accum: Std AMA     Mod AMA     Mfr ADP     Other (specify) GAS: C10 from Ford  
 NMOG Test Procedure: N/A     Std X Equiv     R/L Test Proc: SHED     Pt Source X  
 Engine Configuration: IN LINE 4 Displacement: 2.0 Liters 121 Cubic Inches  
 Valves Per Cylinder: 4 Rated HP 125 @ 5600 RPM  
 Engine: Front X Mid     Rear     Drive: FWD X RWD     4WD-FT     4WD-PT      
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): TWC, H025C2 SEI

(use abbreviations per SAE J1930 Jun93)

Engine Code (also list CA/49st/50st)	Vehicle Models (if coded see attachment)	Trans. (M5, A4 etc.)	ETW or Test Wt.	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
KJad0/804gd001. mca/gfi25h74/eel0 2404h74	Contour	L4	3500 lbm	5.4 hp	See attached Parts List 9788-5E211	See attached Parts List N/A	See attached Parts List 9788-5E211
					-85		-BE