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#### State of California AIR RESOURCES BOARD

### EXECUTIVE ORDER A-325-12 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 1998 model-year GFI Control Systems, Inc. exhaust emission control systems are certified as described below for mediumduty vehicles:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Dual-Fuel Liquefied Petroleum Gas (LPG) or Gasoline (Indolene)

Engine Family: WG9XA05.4JGP <u>Displacement</u>: 5.4 Liters (330 Cubic Inches)

## Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converter Dual Heated Oxygen Sensors Heated Oxygen Sensor Exhaust Gas Recirculation Sequential Multiport Fuel Injection

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

The non-methane organic gases (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) LEV certification exhaust emission standards for this engine family in grams per mile are: (The standards in parentheses are for gasoline.)

Test Weight (lbs.)	Miles	NMOG	CO	NOx	<u>нсно</u>	CO (20°F)
5751-8500					0.022 (0.022) 0.032 (0.032)	12.5 (12.5) n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.50 (LPG) 1.00 (Indolene)

The certification exhaust emission values set forth for NMOG reflect application of a 0.50 or 1.00 RAF for 1998 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are: (The values in parentheses are for gasoline.)

Test Weight (1bs.) Miles		NMOG	CO	N0x	<u>нсно</u>	CO (20°F)	
5751-8500	50,000	0.109 (0.32)	2.8 (1.4)	0.4 (0.4)	0.0003 (0.001)	6.0 (4.5)	
	120,000	0.127 (0.34)	3.2 (1.5)	0.5 (0.5)	0.0003 (0.001)	n/a	

BE IT FURTHER RESOLVED: That the manufacturer shall not be subject to the phase-in requirement as specified in Title 13, California Code of Regulations, Section  $1960.\overline{1(h)(2)}$  Endnote (10)(d) applicable to small-volume manufacturers of medium-duty vehicles.

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 the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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 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 day of October 1998.

Summerfield, Chief

Mobile Source Operations Division

# Air Resources Board Supplemental Data Sheet Passenger Cars, Light Duty Trucks and Medium Duty Vehicles Model Year 1998

ED#A-325-12

Manufacturer: GFI CONTROL SYSTEMS INC Exh Eng Fam: WG9XA05.4JGP EvapFam: WFMXE0155BOG
All Engine Codes in Engine Family: CA X 49s 50s AB965 ORVR: Yes No X
Exh Std: CA Tier-1 TLEV LEV X ULEV SULEV US EPA Tier-1
Veh Class(es): PCLDT1LDT2MDV1MDV2MDV3_X_MDV4MDV5
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
CNGLNGLPG_X_M85Other (specify)
Exh Emiss Test Fuel(s): Indo X CBG CNG LPG X M85 Other (specify)
Diesel: 13 CCR 2282 40 CFR 86.113-90 40 CFR 86.113-90
Evaporative Emissions Test Procedure: California X Federal
Service Accum: Std AMA Mod AMA Mfr ADP Other (specify)
Valves Per Cylinder: 2 Rated HP 235 @ 4250 RPM
Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT
Exhaust ECS (e.g., MFI, EGR, TC, CAC): TWC. 2HO2S , EGR, SFI, H02S
(use abbreviations per SAE J1930 Jun93)
NMOG Test Procedure: N/A Std X Equiv R/L Test Proc: SHED Pt Source X  Engine Configuration: V8 Displacement: 5.4 Liters 330 Cubic Inches  Valves Per Cylinder: 2 Rated HP 235 @ 4250 RPM  Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT  Exhaust ECS (e.g., MFI, EGR, TC, CAC): TWC 2HO2S , EGR, SFI, H025

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.
MAAF1/8-46M GFI025FA	E-250/350 Van GVWR 8050	A4	8000 lbm	17 hp	See attached Parts List F7711-12A366	See attached Parts List F75E-D475-	See attached Parts List F7UA - SE212
					-BA	CA	-KC