State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-325-27 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 2000 model-year GFI Control Systems, Inc. exhaust emission control systems are certified as described below for medium-duty vehicles:

Emission Standard Category: Ultra-Low-Emission Vehicle (ULEV)

Fuel Type: Dual-Fuel Liquid Propane Gas (LPG) or Gasoline (Indolene)

Engine Family: YG9XT05.45NP Displacement: 5.4 Liters (331 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters (two)
Three Way Catalytic Converter
Dual 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 non-methane organic gases (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) ULEV 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>HCHO</u>	CO (20°F)
3751-5750	50,000	0.100 (0.160)	4.4 (4.4)	0.4 (0.4)	0.009 (0.009)	12.5 (12.5)
	120,000	0.143 (0.230)	6.4 (6.4)	0.6 (0.6)	0.013 (0.013)	n/a

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

The certification exhaust emission values set forth for NMOG reflect application of a reactivity adjustment factor (RAF) as listed above for 2000 model-year LPG-fueled ULEVs. The ULEV certification exhaust emission values for this engine family in grams per mile are: (The values in parentheses are for gasoline.)

Test Weight (lbs.)		NMOG	co	NOx	<u>HCHO</u>	CO (20°F)
3751-5750	50,000	0.036 (0.083)	0.5 (0.8)	0.05 (0.2)	0.0000 (0.0004)	1.1 (4.9)
	120,000	0.040 (0.122)	0.6 (1.4)	0.1 (0.3)	0.0000 (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 1960.1(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 1995-2005 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978-2000 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 highaltitude 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 1988-2000 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 28 day of February 2000.

R. B. Summerfield, Chief

Mobile Source Operations Division

E.O. #	A-325-27	
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Air Resources Board Supplemental Data Sheet Passenger Cars, Light Duty Trucks and Medium Duty Vehicles Model Year 2000

Manufacturer: GFI CONTROL SYSTEMS INC. Exh Eng Fam: YG9XT05.45NP Evap Fam: YG9XE0155BAG
Al! Engine Codes in Engine Family: CA 💃 49s_ 50s 🚒 AB965 ORVR: No
Exh Std: CA Tier-1 TLEV LEV ULEV X SULEV . US EPA Tier-1
Veh Class(es): PCLDT1LDT2MDV1MDV2_X_MDV3MDV4MDV5
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 K Bi-Huel Gasoline X Diesel
CNGLNGLPG_X_M85 Other (specify)
Exh Emiss Test Fuel(s): Indo X CBG CNG X LPG M85 Other (specify)
Diesel: 13 CCR 2282 40 CFR 86-(13-96 40 CFR 86.113-90 40 CFR 86.113-90
Evaporative Emissions Test Procedure: California Federal X
Service Accum: Std AMA Mod AMA Mfr ADP Other (specify) LPG: Assigned, Gast clo from OEM
NMOG Test Procedure: N/A Sid X Equiv R/L Test Proc: SHED X Pr Source
Engine Configuration: V8 Displacement: 5.4 Liters 331 Cubic Inches
Valves Per Cylinder: 2 Rated HP 105 @ 4250 RPM
Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT
Exhaust ECS (e.g., MFI, EGR, TC, CAC): SELEGR, 2HO2S(2), 2TWC(2), TWC
(use abbreviations per SAE J1930 Jun93)

EGR Catalytic ETW DPA Ignition Vehicle Models Engine Code Trans. Converter (ECM/PCM) System (if coded see (M5, OF. OY (also list Part No. Part No. RLHP Part No. A4 Test Wt. attachinent) CA/49st/50st) etc.) YL3C-5G218-GA YL3C-5E214-GA YL3F-12A650-X1.3E-9D475-CA 5750 lbs 16.9hp $\Lambda 4$ 0F51410-B00 F-150 PickUp ARA (pasounc) Calibration A3-145 CWSV32-100 (LPG) 2KFLPG01.F4C YL3C-5G218-GA YLJT-12A650-X1.3E-9D475-CA 16.9hp F-150 PickUp 5750 lbs. OF51410-B09 A4YL3C-SE214-GA ARA (gasoline) Calibration A3-145 4WD V32-100 (LPG) 2KFLPG01.F4C