State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-410 Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1988 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

Engine Family	Displacement Liters (Cubic Inches)		Exhaust Emission Control Systems (Special Features)		
J1G5.OW8NTA7	5.0	(305)	Air Injection - Pump Exhaust Gas Recirculation Dual Bed Catalyst Oxygen Sensor (Electronic Fuel Injection)		

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

The following are the emission standards for this engine family:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides
Grams per Mile	Grams per Mile	Grams per mile
0.39	7.0	0.7

The following are the certification emission values for this engine family:

Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	
Grams per Mile	Grams per Mile	Grams per Mile	
0.25	1.0	0.6	

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

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" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle also comply models with the Board's high altitude requirements and highway emission standards 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 Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) 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 regulations (Title 13, California Administrative Code, 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 April, 1987.

K. D. Drachand, Chief Mobile Source Division

17-J1G5.0W8NTA7-1A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-410

Engine Family: JIG5.OWBNTA7

Evaporative Family: JBO-18

Engine Displacement Liters (Cubic Inches) - Type: 5.0 (305) - V8

Exhaust Emission Control System (Special Features): AIP, EGR, DBC, OS (EFI)

ABBREVIATIONS:

Ignition System
CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

Fuel System

OFI, CL, DID, DIP, EFI, MFI

NV-NVenturi Carburetor

VV-Variable Venturi

Other Abbreviations
A/C-Air Conditioning
CID Cubic Inch Displacement
ETW-Equivalent Test Weight
FC Forward Control
HD-Heavy Duty
RI-Rail & Injector
RWD-Rear Wheel Drive
TBI-Throttle Body Injection
4x2-Two Wheel Drive
4x4-Four Wheel Drive
6x4-Four Wheel Drive

Exhaust Emission Control System AIP-Air Injection Pump AIV-Air Injection Valve EGR-Exhaust Gas Recirculation EIC-Electronic Injection Control EM-Engine Modification DBC-Dual Bed Catalyst **HOS-Heated Oxygen Sensor** OC-Oxidation Catalyst OS-Oxygen Sensor SPL-Smoke Puff Limiter or Throttle Delay TOC-Trap Oxidizer, Continual TOP-Trap Oxidizer, Periodical TR-Thermal Reactor TWC-Three-Way Catalyst WUOC-Warm-up Oxidation Catalyst **MUTMC-Warm-up Three-Way Catalyst**

Special Features
CCV-Combustion Chamber Valve
CFI-Central Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EFI-Electronic Fuel Injection
IC-Intercooler/Aftercooler
MFI-Mechanical Fuel Injection
OBD-On-Board Diagnostics
TC-Turbocharger

*\$SUED: 04-02-87 REV. NO.: 001

0274T

17-J1G5.OW8NTA7-2A

(For CARB Use Only) (1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET GASOLINE-FUELED PASSENGER CARS

Executive Order No. A-6-410

VEHICLE MODELS:

1 J U 2 7 (EXAMPLE)

Digit 1 Selling Division

Digit 2 - Body Designation

1-Chevrolet 2-Pontiac 3-01dsmobile 4-Buick 6-Cadillac

A-Celebrity, 6000, Cutlass Ciera, Cutlass Cruiser, Century B-Caprice, Safari Wagon, Custom Cruiser, LeSabre/Electra Wagon C-Ninety-Eight Regency, Electra, DeVille, Fleetwood, Limousine D-Brougham

E-Toronado, Riviera, Eldorado F-Camaro, Firebird, Trans Am, Formula G-Monte Carlo, El Camino, Caballero H-Bonneville, Delta 88 Royale, LeSabre

J-Cavalier, Sunbird, Firenza, Skyhawk, Cimarron

K-Seville

L-Corsica, Beretta

N-Grand Am, Calais, Somerset/Skylark

P-Fiero T-Lemans V-Allante

W-Grand Prix, Regal, Cutlass Supreme

Y-Corvette

Z-Commercial Chassis

Digit 3 <u>Trim Level</u>

Digits 4 & 5 - Body Style

07-2Dr Sport Coupe 47-2Dr Hardtop Coupe 08-2Dr Hatchback Coupe 57-2Dr Hardtop Coupe 67-2Dr Convertible Coupe 11-2Dr Notchback Coupe/Sedan 19-4Dr Sedan 68-4Dr Hatchback Sedan 23-4Dr Auxiliary Seat Sedan 69-4Dr (Notchback) Sedan 77-2Dr Hatchback Coupe 27-2Dr (Notchback) Coupe 33-4Dr Auxiliary Seat Sedan 80-2Dr Sedan Pickup 87-2Dr Hatchback Coupe 35-4Dr Station Wagon 37-2Dr Hardtop Coupe 90-Commercial Chassis 97-2Dr Hardtop Coupe

Engine: Front

Drive: RWD

***SUED: 04-02-87

REV. NO.: 001

0274T

17-J1G5.0W8NTA7-3A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

DIESEL___

PASSENGER CARS X LIGHT DUTY TRUCKS MEDIUM DUTY VEHICLES GAS X

Liters (CID): 5.0 (305)		Type: V8		Executive Order No. A-6-410			
ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (RI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
51	1FP87	A4	3750	16068001	17087264	17087263	25100645
53	1FP87		3750	16070821			
57	2FS87 2FW87		3750 3750(1)	16070811			
59	2FW87 2FW87		3750 3750(2)	16070831			
6]	1FP87	M5	3625	16070871		17087262	
63	1FP87		3750	16070881			

16062451

16070901

Comments: See page one for abbreviations and family information. Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

"SUED: 04-02-87

2FS87

2FW87

2FS87

2FW87

REV. NO.: 001

3750

3750

0274T

67

69

 ²FW87 with 2.77 final drive at 3875 ETW.
 2FW87 with 3.27 final drive at 3875 ETW.

17-J1G5.OW8NTA7-3.1A

(For CARB Use Only)

(1988)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS X LIGHT DUTY TRUCKS MEDIUM DUTY VEHICLES GAS X DIESEL

Liters (CID): 5.0 (305)

Type: V8

Executive Order No. A-6-410

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (RI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
51A	1FP87 1FP67	A4	3750 3875	16082411	17087264	17087263	25100645
53A	1FP87 1FP67		3750 3875	16082431			•
57A	2FS87 2FW87		3750 3750(1)	16082421			
59A	2FW87 2FW87		3750 3750(2)	16082441, 16082451			
61A	1FP87 1FP67	M5	3625 3750	16082461		17087262	
63A	1FP87 1FP67		3750	16082481			
67A	2FS87 2FW87		3750	16082471			
69A	2FS87 2FW87		3750	16082501, 16082491			

^{(1) 2}FW87 with 2.77 final drive at 3875 ETW.

Comments: See page one for abbreviations and family information. Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

UED: 002

REV. NO.:

0274T/25T

^{(2) 2}FW87 with 3.27 final drive at 3875 ETW.