

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-444
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 1989 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks and medium-duty vehicles:

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
	<u>Liters</u>	<u>(Cubic Inches)</u>	
K3G4.3T5TAA1	4.3	(262)	Air Injection - Pump (some models) Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (On-Board Diagnostics) (Central 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:

<u>Loaded Vehicle</u> <u>Weight(lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
3751-5750	0.50	9.0	1.0

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

<u>Loaded Vehicle</u> <u>Weight(lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
3751-5750	0.34	5.6	0.8

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 models also comply 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 vehicle models listed also comply with 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 16th day of February, 1988.


K. D. Drachand, Chief
Mobile Source Division

17-K3G4.3T5TAA1-1A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-444

Engine Family: K3G4.3T5TAA1

Evaporative Family: KFO-3B

Engine Displacement Liters (Cubic Inches) - Type: 4.3 (262)

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI) and
EGR, TWC, OS (OBD)(CFI)

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

I, DID, DIP, EPFI, HOS, MPFI, OS, SFI
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
FWD-Front Wheel Drive
4WD-Four 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 (Diesel Only)
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
TWC-Three-Way Catalyst
WUOC-Warm-up Oxidation Catalyst
WUTWC-Warm-up Three-Way Catalyst

Special Features

CCV-Combustion Chamber Valve
CFI-Central Fuel Injection or Throttle
Body Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EPFI-Electronic Port Fuel Injection
IC-Intercooler/Aftercooler
MPFI-Mechanical Port Fuel Injection
OBD-On-Board Diagnostics
SC-Supercharger
SFI-Sequential Fuel Injection
TC-Turbocharger

Engine: Front (All Vehicles)

Drive: See Chassis Type (Page 3A), all 4 X 2 Vehicles are RWD

ISSUED: 01-15-88

REV. NO.: 001

0173V/11V

17-K3G4.3T5TAA1-Index 1A

(For CARB Use Only)

(1989)

SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

<u>Section and Page No.</u>	<u>Rev. No. or Date</u>	<u>Item</u>
17-K3G4.3T5TAA1-Index 1A	006	Table of Contents
17-K3G4.3T5TAA1-1A	001	Supplemental Data Sheet
17-K3G4.3T5TAA1-3A	01-15-88	Supplemental Data Sheet
17-K3G4.3T5TAA1-4A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-5A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-5B	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-6A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-7A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-8A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-9A	005	Supplemental Data Sheet
17-K3G4.3T5TAA1-10A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-11A	001	Certification Review Sheet

NOTES:

- (1) See page one for abbreviations and family information.
- (2) Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.
- (3) If two test weights are listed, the lower weight will be used for testing.
- (4) Letter derivative codes are the same as corresponding numeric codes except as indicated.

ISSUED: 01-15-88

REV. NO.: 001

005

002

006 (RC K3-121)

003

004 (RC K3-067)

PW008-3

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-444

Engine Family: K3G4.3T5TAA1

Evaporative Family: KFO-3B

Engine Displacement Liters (Cubic Inches) - Type: 4.3 (262)

Exhaust Emission Control System (Special Features): EGR, TWC, OS (OBD) (CFI)

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

CFI,DID,DIP,EPFI,HOS,MPFI,OS,SFI
Venturi Carburetor
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
FWD-Front Wheel Drive
4WD-Four 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 (Diesel Only)
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
TWC-Three-Way Catalyst
WUOC-Warm-up Oxidation Catalyst
WUTWC-Warm-up Three-Way Catalyst

Special Features

CCV-Combustion Chamber Valve
CFI-Central Fuel Injection or Throttle
Body Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
EPFI-Electronic Port Fuel Injection
IC-Intercooler/Aftercooler
MPFI-Mechanical Port Fuel Injection
OBD-On-Board Diagnostics
SC-Supercharger
SFI-Sequential Fuel Injection
TC-Turbocharger

Engine: Front (All Vehicles)

Drive: See Chassis Type (Page 3A)

ISSUED: 01-15-88

REV. NO.:

V/

(For CARB Use Only)
(1989)AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Executive Order No. A-6-444

VEHICLE MODELS:

C C 1 0 7 0 3 + E 6 3 (EXAMPLE)

Digit 1
Selling DivisionC-Chevrolet
T-GMC TruckDigit 2
Chassis TypeC-Conventional 4x2
G-Forward Control 4x2
(Body Frame Integral)
K-Conventional 4x4
M-Forward Control 4x2
(Body Frame Integral)
P-Forward Control 4x2
(Conventional)
R-Conventional 4x2
S-S10/15 4x2
10/15 4x4
Conventional 4x4Digit 3
Series/GVWR Range1-3400 to 7300 lbs
2-6400 to 8600 lbs
3-7400 to 14500 lbsDigits 4 & 5
CA Dimension/Model Type05-Blazer/Jimmy, Step-Van/
Value Van
06-S10/15
07-42"/Pickup, Chassis-Cab
08-FC or Motor Home Chassis,
Step-Van/Value Van
09-56"/Suburban, Chassis-
Cab, Pickup
10-60" FC Chassis, Chevy
Van/Vandura, Sportvan/
Rally, Chassis-Cab,
Step-Van/Value Van
11-Motor Home Chassis
13-Chevy Van/Vandura,
Sportvan/Rally, Cutaway
Van/Vandura Special,
Hi-Cube Van/Magnavan
14-84"/FC or Motor Home,
Chassis, Chassis-Cab,
Step-Van/Value Van
16-Cutaway Van/Vandura
Special, Hi-Cube Van/
Magnavan
18-Motor Home ChassisDigits 6 & 7
Cab or Body Style03-Conventional Cab
(S10/15, C-K, R-V
Models)
-Cutaway Van/Vandura
Special, Hi-Cube Van/
Magnavan (G Models)
05-Chevy Van/Vandura
06-Suburban/Sportvan/
Rally with Panel Rear
Doors
16-Blazer/Jimmy
32-Motor Home Chassis
42-Forward Control
Chassis, Step-Van/
Value Van
43-Bonus Cab, Crew Cab
53-Extended Cab
(S10/15 Models)Digits 8, 9 & 10
Body Ordering CodeZW9-Base Body
C6P-HD Chassis; 8600 lb GVWR
C7C-HD Chassis; 10500 lb GVWR
C7E-HD Chassis; 11000 lb GVWR
E31-Hi-Cube Van (10' Steel 96" Wide)
E32-Step-Van/Value Van (Steel)
E33-Step-Van/Value Van (Aluminum)E34-Hi-Cube Van (10' Steel 82" Wide)
E36-Hi-Cube Van/Magnavan (10' Aluminum)
E37-Utility Box (Aluminum)
E38-Hi-Cube Van/Magnavan (12' Steel)
E39-Hi-Cube Van/Magnavan (12' Aluminum)
E62-Stepside/Fenderside Pickup
E63-Fleetwide/Wideside PickupEngine Location: Front (All Vehicles)
Drive Axle Location: See Chassis Type; All 4x2 Vehicles are RWD

ISSUED: 01-15-88

REV. NO.:

3V/

17-K3G4.3T5TAA1-4A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES___ GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.
				(ECU) PART NO.	(TBI) PART NO.		
51	CC10703+E62	A4	4000	16083541	17087162, 17087090	17087026	25104275, 25103272
	CC10703+E63						
	CC10903+E63		4250				
	CC10953+E63		4500				
	CC10753+E63						
52	CC10703+E62		4000				
	CC10703+E63						
	CC10903+E63		4250				
	CC10953+E63		4500				
	CC10753+E63						
53	CK10703+E62		4500			17087192	
	CK10703+E63						
	CK10903+E63		4750				
54	CK10703+E62		4500				
	CK10703+E63						
	CK10903+E63		4750				
55	CG11005		4250	16083061	17089027	17087026	25104273, 25103276
	CG11305						
56	CG11005						
	CG11305						

(1) Vehicle models, although shown as Chevrolet, refer to both Chevrolet and GMC models.

ISSUED: 01-15-88

REV. NO.: 001, 004, 006

PW008-3

17-K3G4.3T5TAA1-5A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES___ GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
57	CM10905 CM10906	A4	3750 4250	16083061	17089027	17087026	25104273, 25103276
58	CM10905 CM10906		3875 4250				

ISSUED: 01-15-88

REV. NO.: 001, 006

PW008-3

17-K3G4.3T5TAA1-5B

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES___ GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.	
				(ECU) PART NO.	(TBI) PART NO.			
59	CC10903+E63		4250	16083531	17087162, 17087090	17087025	25104275, 25103272	
	CC10953+E63		4500					
	CC10753+E63							
60	CC10903+E63		4250					
	CC10953+E63		4750					
	CC10753+E63		4500					
	CK10703+E62					17087026		
	CK10703+E63							
	CK10903+E63		4750					
62	CK10703+E62		4500					
	CK10703+E63		4750					
	CK10903+E63							

ISSUED: 001

REV. NO.: 004, 005, 006

PW008-3

17-K3G4.3T5TAA1-6A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES___ GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.
				(ECU) PART NO.	(TBI) PART NO.		
65	CG11005 CG11305	M4	4250	16083571	17089027	17087026	25104273, 25103276
66	CG11005 CG11305		4500				
67	CC10703+E62 CC10703+E63 CC10903+E63 CC10953+E63 CC10753+E63	M5	4000 4250 4500	16083551	17087162, 17087090	17087025	25104275, 25103272
68	CC10703+E62 CC10703+E63 CC10903+E63 CC10953+E63 CC10753+E63		4000 4250 4500				

ISSUED: 01-15-88

REV. NO.: 001, 004, 006

PW008-3

17-K3G4.3T5TAA1-7A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES___ GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.
				(ECU) PART NO.	(TBI) PART NO.		
69	CK10703+E62 CK10703+E63 CK10903+E63	M5	4500	16083551	17087162, 17087090	17087026	25104275, 25103272
70	CK10703+E62 CK10703+E63 CK10903+E63		4750				
73	CM10905 CM10906		3750 4250	16083571	17089027	17087025	25104273, 25103276
74	CM10905 CM10906		3875 4250				

ISSUED: 01-15-88

REV. NO.: 001, 005, 006

PW008-3

17-K3G4.3T5TAA1-8A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES_X GAS_X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.
				(ECU) PART NO.	(TBI) PART NO.		
53	CC20903+E63	A4	4250	16083541	17087162, 17087090	17087192	25104275, 25103272
	CC20953+E63		4500				
	CC20753+E63						
	CK10953+E63		5000				
	CK10753+E63						
	CK20903+E63						
	CK20753+E63						
	CK20953+E63		5250				
54	CC20903+E63		4250				
	CC20953+E63		4500				
	CC20753+E63						
	CK10953+E63		5250				
	CK10753+E63		5000				
	CK20903+E63						
	CK20953+E63		5250				
	CK20753+E63		5000				
55	CG21005		4250	16083061	17089027	17087026	25104273, 25103276
	CG21305		4500				
	CG21306		4750				
56	CG21005		4250				
	CG21305		4500				
	CG21306		4750				

ISSUED: 01-15-88

REV. NO.: 001, 002, 004, 005, 006

PW008-3

17-K3G4.3T5TAA1-9A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES X GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
61	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63	M4	4500 4750 4500 5250 5000	16083531	17087162, 17087090	17087026	25104275, 25103272
62	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63		4500 4750 4500 5250 5000				
63	CK20903+E63 CK20953+E63 CK20753+E63		5000 5250 5000			17087192	
64	CK20903+E63 CK20953+E63 CK20753+E63		5000 5250				
65	CG21005 CG21305 CG21306		4250 4500 4750	16083571	17089027	17087026	25104273, 25103276
66	CG21005 CG21305 CG21306		4250 4500 4750				

ISSUED: 01-15-88

REV. NO.: 001
002
003
004
005

PW008-3

17-K3G4.3T5TAA1-10A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS___ LIGHT DUTY TRUCKS___ MEDIUM DUTY VEHICLES X GAS X DIESEL___

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.
				(ECU) PART NO.	(TBI) PART NO.		
69	CC20903+E63	M5	4250	16083551	17087162, 17087090	17087026	25104275, 25103272
	CC20953+E63		4500				
	CC20753+E63						
	CK10953+E63		5000				
	CK10753+E63						
70	CC20903+E63		4250				
	CC20953+E63		4500				
	CC20753+E63						
	CK10953+E63		5000				
	CK10753+E63						
71	CK20903+E63		4750			17087192	
	CK20953+E63		5250				
	CK20753+E63		5000				
72	CK20903+E63						
	CK20953+E63		5250				
	CK20753+E63		5000				

ISSUED: 01-15-88

REV. NO.: 001, 004, 005, 006

PW008-3