

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-377
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 1987 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered light duty trucks:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
H3G2.8T5TRY0	173 (2.8)	Air Injection Pump Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor (Electronic Fuel Injection) CFI

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>Equivalent Inertia Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per mile</u>
0-3999	0.39	9.0	1.0
4000-5999	0.50	9.0	1.0

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

<u>Equivalent Inertia Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0-3999	0.19	6.1	0.7
4000-5999	0.20	4.8	0.4

BE IT FURTHER RESOLVED: That the listed models in the 0-3999 equivalent inertia weight class 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 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 1981 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 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 9th day of July, 1986.


K. D. Drachand, Chief
Mobile Source Division

17-H3G2.8T5TRY0-1A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

LIGHT DUTY TRUCKS ~~AND MEDIUM DUTY VEHICLES AND HEAVY DUTY ENGINES~~

Manufacturer: General Motors Corporation

Executive Order No.: A-6-377

Engine Family: H3G2.8T5TRY0

Evaporative Family: 7B0-3B

Engine CID (Liters) - Type: 2.8 (173)

ABBREVIATIONS:

Ignition System

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

Fuel System

CFI, CL, DID, DIP, EFI, MFI
nV-nVenturi Carburetor

GM Abbreviations

A/C-Air Conditioning
FC-Forward Control
HD-Heavy Duty
CID-Cubic Inch Displacement
TBI-Throttle Body Injection
RWD-Rear Wheel Drive
4x2-Two Wheel Drive
4x4-Four Wheel Drive
6x4-Four Wheel Drive

Exhaust Emission Cont System

AIP-Air Injection Pump
AIV-Air Injection Valve
CL-Closed Loop
EGR-Exhaust Gas Recirculation
EM-Engine Modification
OC-Oxidation Catalyst System
SPL-Smoke Puff Limiter or Throttle Delay
TOC-Trap Oxidizer, Continual
TOP-Trap Oxidizer, Periodical
TR-Thermal Reactor
TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve
CFI-Central Fuel Injection
DID-Diesel Injection-Direct
DIP-Diesel Injection-Prechamber
~~EFI-Electronic~~ Central Fuel Injection
IC-Intercooler/Aftercooler
MFI-Mechanical Fuel Injection
TC-Turbocharger

Engine: Front (all Vehicles)

Drive: See Chassis Type (Page 2), all 4x2 vehicles are RWD.

ISSUED: 06-10-86

REV. NO.:

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17-H3G2.8T5TRY0-2A

(For CARB Use Only)
(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
LIGHT DUTY TRUCKS ~~AND MEDIUM DUTY VEHICLES~~

Manufacturer: General Motors Corporation
Engine Family: H3G2.8T5TRY0
Engine CID (Liters) - Type: 2.8 (173)

Executive Order No.: A-6-377
Evaporative Family: 7B0-3B

VEHICLE MODELS:

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

Digit 1
Selling Division

C-Chevrolet
T-GMC Truck

Digit 2
Chassis Type

C-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
T-S10/15 4x4
V-Conventional 4x4

Digit 3
Series/GVWR Range

1-3400 to 7300 lbs
2-6400 to 8600 lbs
3-7400 to 14500 lbs

Digits 4 & 5
CA Dimension/Model Type

05-Blazer/Jimmy, Step-Van/
Valve 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 Chassis

Digits 6 & 7
Cab or Body Style

03-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 Code

ZW9-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 Pickup

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17-H3G2.8T5TRY0-3A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES _____ GAS X DIESEL _____

Manufacturer: General Motors Corporation

Executive Order No.: A-6-377

Engine Family: H3G2.8T5TRY0

Exhaust Emission Control System: AIP/CL/EGR/TWC (EFI)

Liter (CID): 2.8 (173)

Engine Type: V-6

ENG CODE	VEH MODELS	TRANS TYPE	EQUIV TEST WEIGHT	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.	
1	CS10603+E63	M-4	3125	16058041	17087087	17086720	25056471	
	CS10803+E63		3250					
	CS10653+E63							
	CS10516		3500					
	CT10603+E63							17087088
	CT10803+E63		(1)					3625
	CT10803+E63		(2)					3750
	CT10653+E63		(2)					3875
	CT10653+E63		(1)					3750
	CT10516							4000
CT10516	(1)	3875						
2	CS10603+E63	(2)	3250		17087087			
	CS10603+E63	(1)	3125					
	CS10803+E63							
	CS10653+E63		3375					
	CS10516		3625					
	CT10603+E63	(2)	3750		17087088			
	CT10603+E63	(1)	3625					
	CT10803+E63							
	CT10653+E63		3875					
CT10516		4000						

- (1) Trans code MC9
- (2) Trans Code M73

Comments: See page one for abbreviations and evaporative emission family identification. 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.

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003

0080S/10S

17-H3G2.8T5TRY0-4A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES _____ GAS X DIESEL _____

Manufacturer: General Motors Corporation

Executive Order No.: A-6-377

Engine Family: H3G2.8T5TRY0

Exhaust Emission Control System: AIP/CL/EGR/TWC (EFI)

Liter (CID): 2.8 (173)

Engine Type: V-6

ENG CODE	VEH MODELS	TRANS TYPE	EQUIV TEST WEIGHT	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
3	CS10603+E63	M-5	3125	16058091	17087087	17086720	25056471
	CS10803+E63		3250				
	CS10653+E63						
	CS10516		3625				
	CT10603+E63				17087088		
	CT10803+E63		3750				
	CT10653+E63		3875				
	CT10516		4000				
	CS10603+E63		3250		17087087		
	CS10803+E63						
	CS10653+E63		3375				
	CS10516		3625				
	CT10603+E63		3750		17087088		
	CT10803+E63						
	CT10653+E63		3875				
	CT10516		4000				

Comments: See page one for abbreviations and evaporative emission family identification. 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.

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17-H3G2.8T5TRY0-5A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES _____ GAS X DIESEL _____

Manufacturer: General Motors Corporation

Executive Order No.: A-6-377

Engine Family: H3G2.8T5TRY0 Exhaust Emission Control System: AIP/CL/EGR/TWC (EFI)

Liter (CID): 2.8 (173)

Engine Type: V-6

ENG CODE	VEH MODELS	TRANS TYPE	EQUIV TEST WEIGHT	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
5	CS10516 CT10603+E63 CT10803+E63 CT10653+E63 CT10516	M-5	3500 3625 3750 3875 4000	16058101	17087087 17087088	17086720	25056471
6	CS10516 CT10603+E63 CT10803+E63 CT10653+E63 CT10516		3500 3625 3750 3875 4000		17087087 17087088		
7	CS10603+E63 CS10803+E63 CS10653+E63 CS10516	A-3	3125 3250 3625	16069481	17087086		
8	CS10603+E63 CS10803+E63 CS10653+E63 CS10516		3250 3375 3625				

Comments: See page one for abbreviations and evaporative emission family identification. 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.

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17-H3G2.8T5TRY0-6A

(For CARB Use Only)

(1987)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES _____ GAS X DIESEL _____

Manufacturer: General Motors Corporation

Executive Order No.: A-6-377

Engine Family: H3G2.8T5TRY0

Exhaust Emission Control System: AIP/CL/EGR/TWC (EFI)

Liter (CID): 2.8 (173)

Engine Type: V-6

ENG CODE	VEH MODELS	TRANS TYPE	EQUIV TEST WEIGHT	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
13	CS10603+E63 CS10803+E63 CS10653+E63 CS10516 CT10603+E63 CT10803+E63 CT10653+E63 CT10516	A-4	3250 3375 3625 3750 3875 4000	16058031	17087086, 17087087 17087088	17086720	25056471
14	CS10603+E63 CS10803+E63 CS10653+E63 CS10516 CT10603+E63 CT10803+E63 CT10653+E63 CT10516		3250 3375 3625 3750 3875 4000		17087086, 17087084 17087088		
15	CS10803+ZW9		3875	16058111	17087086, 17087087		
16	CS10803+ZW9						

Comments: See page one for abbreviations and evaporative emission family identification. 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.

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004

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