

## Vehicle Identification Number

1

## Vehicle Identification Number (VIN)

- Unique identification number for every vehicle manufactured for sale in the US
- Fingerprint is unique for a person, a VIN is unique for every vehicle
- Contains coded information about the vehicle
- Primary purpose: identify each vehicle if stolen
- Other uses:
  - Track registrations
  - Insurance coverage
  - Track parking tickets
  - **Smog Check Vehicle Identification**

2

## Pre 1981 VIN

- First used in 1954
- From 1954 to 1981, there was no accepted standard
- Manufacturers used different formats
- Location on the vehicle was not standardized
- **This affects 1976 to 1980 vehicles that are subject to smog inspection**

3

## PRE 1981 VIN Plates



4

## Early VID Decoding

### GM VIN for 1960 Corvette



5

### 1965 COMET IDENTIFICATION

EXTERIOR PAINT COLOR (WHITE)      DATE CODE (26TH DAY AUGUST)      AXLE RATIO CODE (3.00:1 AXLE RATIO)      TRANSMISSION CODE (DUAL RANGE AUTOMATIC (C-4))

BODY STYLE (404 4-DOOR SEDAN)      INTERIOR TRIM (RED VINYL)      DETROIT DISTRICT      TRANSMISSION CODE (DUAL RANGE AUTOMATIC (C-4))

BODY	COLOR	TRIM	DATE	DSO	AXLE	TRANS
54B	M	25	26H	34	1	6

VEHICLE WARRANTY NUMBER  
**5H12C 500001**

**MERCURY COMET**

NOT FOR TITLE OR REGISTRATION PURPOSES

THIS VEHICLE IS MANUFACTURED UNDER UNITED STATES AND FOREIGN PATENTS AND PATENT APPLICATIONS

A PRODUCT OF MOTOR COMPANY      MADE IN U.S.A.

MODEL YEAR (1965)      ASSEMBLY PLANT (LORAIN)      CONSECUTIVE UNIT NUMBER      [MercuryStuff.com](http://MercuryStuff.com)

ENGINE CODE (8 CYL. 289 CID ENGINE)  
BODY SERIAL CODE (404 4-DOOR SEDAN)

6



## 17 Character VIN Breakdown

- 1<sup>st</sup>: character identifies the country of origin
- 2<sup>nd</sup>: character identifies the manufacturer
- 3<sup>rd</sup>: character identifies a division within the manufacturer

9

## North America Country Codes

- North American Countries are represented by numbers:
  - United States (1, 4 or 5)
  - Canada (2)
  - Mexico (3)

10

## Characters 4 through 8

- These characters do not have a designated use
- Manufacturers are allowed to use them to describe the attributes of the vehicle
- 4<sup>th</sup> character often identifies the platform
- 5<sup>th</sup> and 6<sup>th</sup> characters identify other vehicle attributes
- 7<sup>th</sup> character usually identifies body type (ie coupe, sedan, SUV, truck)
  - This character must always be alphabetic
- 8<sup>th</sup> character usually provides the engine information
- <http://www.angelfire.com/ca/TORONTO/VIN/WMI.html#mfg>

11

## 17 Character Breakdown

- 9<sup>th</sup> character is always an accuracy check digit
  - <http://www.angelfire.com/ca/TORONTO/VIN/checkdigit.html>
- **10<sup>th</sup> character is the model year**
  - **September 1<sup>st</sup> through August 31<sup>st</sup>**
- 11<sup>th</sup> is the plant code
- Last six characters, 12 through 17, are the production sequence numbers

12

## 10<sup>th</sup> Character is Model Year

A	1980	L	1990	Y	2000	A	2010
B	1981	M	1991	1	2001	B	2011
C	1982	N	1992	2	2002	C	2012
D	1983	P	1993	3	2003	D	2013
E	1984	R	1994	4	2004	E	2014
F	1985	S	1995	5	2005	F	2015
G	1986	T	1996	6	2006	G	2016
H	1987	V	1997	7	2007	H	2017
J	1988	W	1998	8	2008	J	2018
K	1989	X	1999	9	2009	K	2019

Pattern repeats every  
30 years

13

## Standardized Location

- Driver's side dashboard visible through the windshield from outside the car
- Also located on a decal in the drivers side door jam
- **Caution if using the VIN on the door jam**

14



15



16





17



18

## Motor Vehicle Theft Prevention Standard

- Established in 1987
- Requires the VIN be affixed to major parts like engines, hoods and fenders) of vehicles considered "high theft" risk.

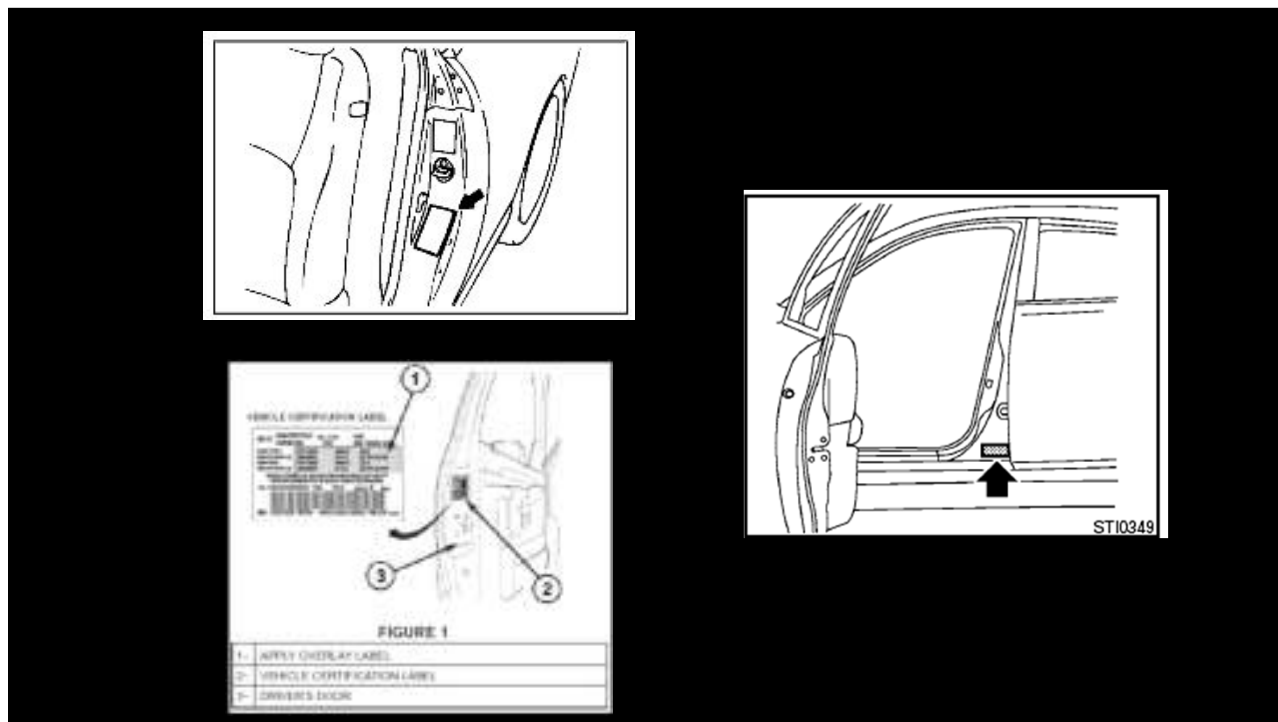


19

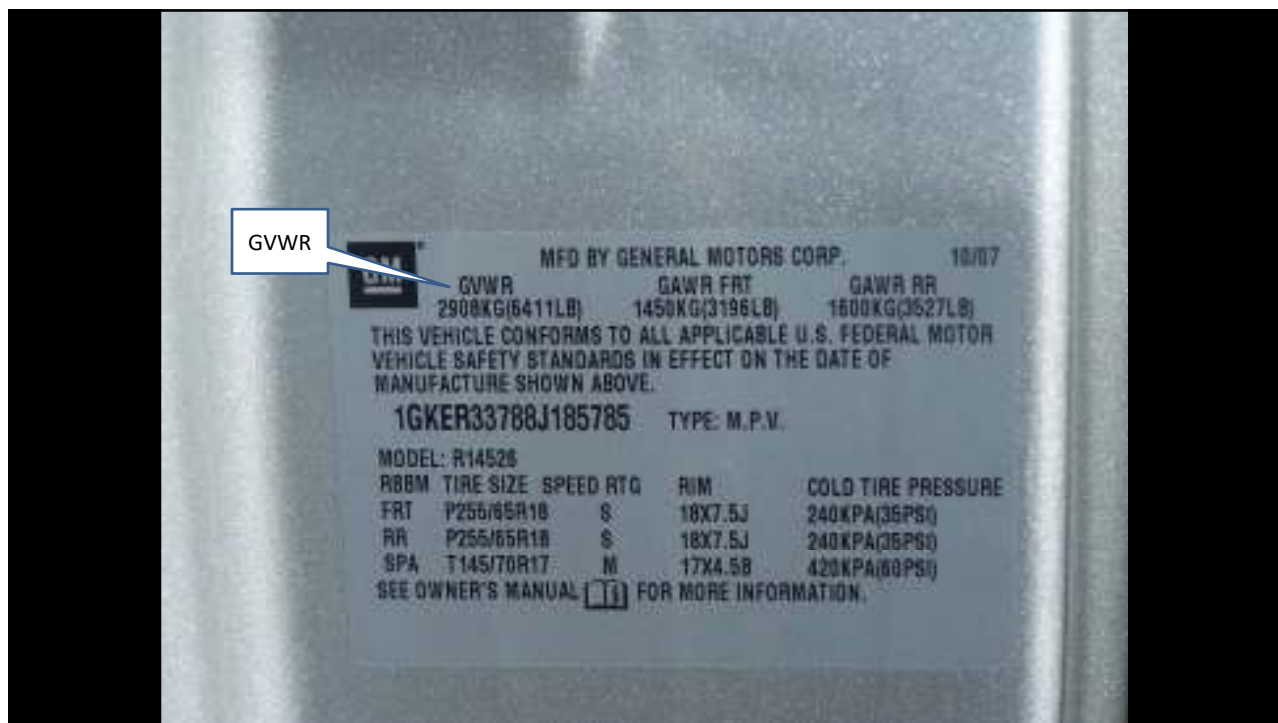
## VEHICLE SAFETY CERTIFICATION LABEL

- Attached to the left side pillar post or on the rearward-facing section of the left front door.
- Month and year of manufacture
- Gross vehicle weight rating (GVWR)
- Gross axle weight rating (GAWR)
- Vehicle Identification Number (VIN).

20



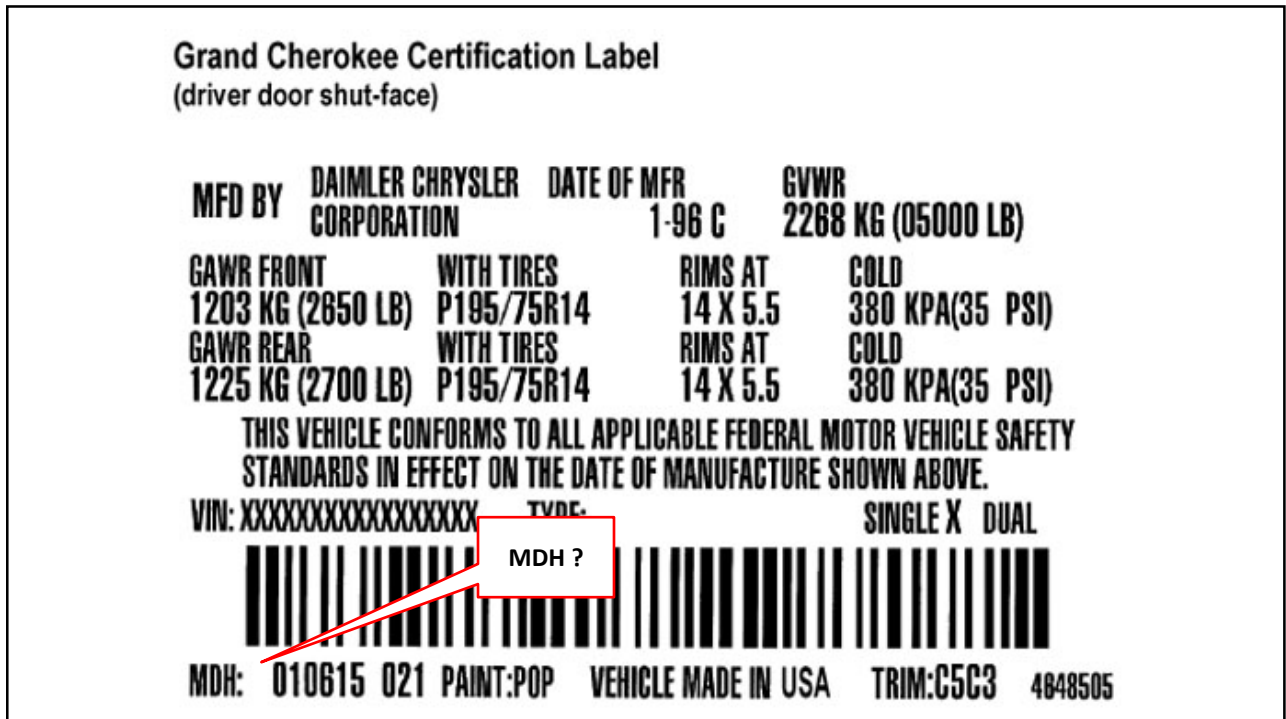
21



22



23



24

## Gross Vehicle Weight Rating

- A gross vehicle weight rating (GVWR) is the maximum allowable total weight of a road vehicle or trailer when loaded - i.e., including the weight of the vehicle itself plus passengers, and cargo.
  
- For example, a pickup truck with a curb weight of 4,500 pounds (2,041 kg) might have a cargo capacity of 2,000 pounds (907 kg), meaning it can have a gross weight of 6,500 pounds (2,948 kg) when fully loaded.

25

## Vehicle Emission Control Label (VECI)

<p><i>Ford Motor Company</i></p> <p><b>VEHICLE EMISSION CONTROL INFORMATION</b></p> <p>This vehicle conforms to U.S. EPA regulations applicable to 2004 model year new IT2bin 10 light-duty trucks. This vehicle conforms to federal regulations and is certified for sale in California. ULEV qualified in California. OBD II certified.</p> <p style="text-align: center;">TWC/HO2S/EGR/SFI</p> <p><b>Attention:</b> Dyno Restrictions may apply. Vehicle may have: AWB, ABS, Traction Control</p> <p><b>Adjustments:</b> Spark Plug Gap: .052-.056 No other adjustments needed.</p>	<p style="text-align: center;">VACUUM HOSE ROUTING</p>
<p>▽4W7E-9C485- <b>LAB</b></p>	<p style="text-align: center;"><b>CATALYST</b></p> <p>4.6L-Group: 4FMXT05.4RFC Evap: 4FMXR0240NBM</p>

A0086703

Figure 1: Typical Vehicle Emission Control Information (VECI) Decal.

26

## VECI LABEL

- Engine identification
- Required Emission Equipment
- Emissions standard that the vehicle meets
- Vacuum hose routing diagram
- Base ignition timing (if adjustable)
- Spark plug type and gap
- Valve lash
- Emission calibration code

27



28

## EMISSION STANDARDS

- Environmental Protection Agency (EPA)
  - In the United States, emissions standards are managed by the EPA as well as some U.S. state governments.
- California Air Resources Board (CARB).
  - The strictest standards in the world are established in California by CARB



29

## Grey Market Vehicles

- Vehicle that was not designed for sale in the United States
- Does not meet US Federal Safety Standards (airbags or passive belt systems)
- May not meet Federal or California emission standards

30

## Identifying Grey Market Vehicles

- Vehicle Certification Label:
  - Vehicle meets “*Canadian Safety Standards for vehicle model year 2000*”
- Speedometer is in kilometers
- Gauges are in liters
- Vehicle Certification Label is printed in Arabic
- Grey Market vehicle must be referred to the Referee for certification and a Referee label

31

## Identifying Grey Markets



32