

VEHICLE IDENTIFICATION NUMBER (VIN) DECODING

Originally, Vehicle Identification Numbers (VIN) were designated to identify a vehicle, but there was no standardization. Beginning in 1981, vehicles were assigned an International VIN code consisting of 17 characters (which cannot include the letter I, O or Q) unique to each vehicle.

The VIN serves a variety of purposes. As well as providing identification in licensing and insuring the vehicle, the history of the vehicle can be tracked. VIN codes provide complete vehicle information including:

- is the vehicle defective (lemon car)
- has the vehicle been totaled or had major accident damage
- has the vehicle had flood damage
- has the vehicle had odometer fraud
- has the vehicle been stolen

To help decode the VIN, the following information has been provided:

- 1st - 3rd Characters
Identify the manufacturer (country), make and type of vehicle.
- 4th - 8th Characters
Identify the different aspects of the vehicle.

For each type of vehicle (passenger cars, multi-passenger vehicles (MPVs), trucks, buses, trailers, motorcycles, incomplete vehicles other than trailers) different information is required.

For cars, MPVs and light-duty trucks:

- 4th - 5th positions are alphabetic
- 6th - 7th positions are numeric
- 8th position can be either alphabetic numeric

- 9th Character (or Check Digit)
Is determined by a complicated formula.

Each character is assigned a numerical value and then multiplied by the value assigned to its position. These values assigned to its position. These values are added and then divided by 11. The remainder is the Check Digit. This character can be numeric or the letter X.

- 10th Character
Identifies the vehicle model year.
- 11th Character
Identifies the plant of manufacture.
- 12th - 17th Characters
Consists of a sequential production number for manufacturers producing more than 500 vehicles per year.

VIN NUMBER ORIGIN AND YEAR

1ST CHARACTER - COUNTRY OF ORIGIN			10TH CHARACTER - YEAR			
1- U.S.A	K- Korea	W- Germany	A- 1980	H- 1987	R- 1994	1- 2001
2- Canada	L- Taiwan	Y- Sweden or	B- 1981	J- 1988	S- 1995	2- 2002
3- Mexico	M- Thailand	Finland	C- 1982	K- 1989	T- 1996	3- 2003
4- U.S.A	S- Great Britain	Z- Italy	D- 1983	L- 1990	V- 1997	4- 2004
5- Brazil	V- France or		E- 1984	M- 1991	W- 1998	5- 2005
J- Japan	Yugoslavia		F- 1985	N- 1992	X- 1999	
			G- 1986	P- 1993	Y- 2000	

VIN plates are read through the windshield on the driver's side of most vehicles. A manufacturer may use a variation of the same size engine in one model. To insure that you are using the correct filters for the application, it is necessary to identify the proper engine code. The following examples illustrate the location of the engine code in most manufacturer's VIN codes.

DOMESTIC VEHICLE IDENTIFICATION NUMBER (VIN)

AMC/EAGLE (EXCEPT JEEP)

1972-1980

ENGINE CODE

(Seventh Character)

A3M798Z700001

1981-1988

ENGINE CODE

(Fourth Character)

2CCBN387*GB529063

1989-on

ENGINE CODE

(Eighth Character)

2E3BB66U*LH038364

CHEVROLET/GMC TRUCK

1970-1980

ENGINE CODE

(Third Character)

CCD13AF100007

1981-on

ENGINE CODE

(Eighth Character)

1GTDC14N*GF100001

CHRYSLER, FORD, GMC

1972-1980

ENGINE CODE

(Fifth Character)

1H35L7R100001

1981-on

ENGINE CODE

(Eighth Character)

1G3AL69N*CM100001

DOMESTIC VEHICLE IDENTIFICATION NUMBER (VIN) (Cont'd)

FORD TRUCK

1970-1980

ENGINE CODE

(Fourth Character)

F25FLGA0000

1981-on

ENGINE CODE

(Eighth Character)

1G3AL69N*CM100001

JEEP

1971-1974

ENGINE CODE

(up to SN# 10000)

(Eighth Character)

J4A154CN00001

1975-1980

ENGINE CODE

(from SN# 10000)

(Seventh Character)

J5A15EN100011

HUMMER

1995-on

ENGINE CODE

(Fourth Character)

137XE82H*TE013212

1981-1988

ENGINE CODE

(Fourth Character)

1JTHE811*HT309520

1989-on

ENGINE CODE

(Eighth Character)

1J4ET37L*LT438789

IMPORTED VEHICLE IDENTIFICATION NUMBER (VIN)

DAIHATSU

1988-1992

ENGINE CODE

(Eighth Character)

JD1FG120*J4200020

LAND ROVER

1987-on

ENGINE CODE

(Seventh Character)

SALHV124*MA123456

HYUNDAI

1986-on

ENGINE CODE

(Eighth Character)

KMHB31S*MU000001

MERKUR

1985-90

ENGINE CODE

(Eighth Character)

WF1BT81V*H1000010

INFINITI

1990-on

ENGINE CODE

(Fourth Character)

JNKN01C*M1100001

MG

1970-79

ENGINE CODE

(Second Character)

GNN5UH000001G

1980

ENGINE CODE

(Fifth Character)

GVADJ1AG000001

ISUZU (EXCEPT OASIS)

1981-on

ENGINE CODE

(Eighth Character)

JABRT697*FU015643

MITSUBISHI

1983-on

ENGINE CODE

(Eighth Character)

JA4MT41P*WP123456

JAGUAR

1979-1980

ENGINE CODE

(Fifth Character)

JAVLN49C000001

1981-on

ENGINE CODE

(Seventh Character)

SAJAV13N*00000100

NISSAN (EXCEPT QUEST)

1995-on

ENGINE CODE

(Fourth Character)

JN1PS245*GW000001

KIA

1994-on

ENGINE CODE

(Eighth Character)

KNARA122*T1234560

PEUGOT

1981-91

ENGINE CODE

(Sixth Character)

YF3BA516*FS368001

IMPORTED VEHICLE IDENTIFICATION NUMBER (VIN) (Cont'd)

SAAB

<u>1981-83</u>	<u>1984-on</u>
ENGINE CODE	ENGINE CODE
(Seventh Character)	(Eighth Character)
YS3BT55S*D3000001	YS3CT55N*F3000001

SUZUKI

1986-on
ENGINE CODE
(Sixth Character)
JS3TA01C*K1000010

SUBARU

<u>1975-79, 1980 (Brat)</u>	<u>1980 (Except Brat)</u>
ENGINE CODE	ENGINE CODE
(Third Character)	(Seventh Character)
A26-000001	JF1AFA421FAG000001

1981-on
ENGINE CODE
(Sixth Character)
JF1AC43B*GB200001

VOLVO

1981-96
ENGINE CODE
(Sixth and Seventh Characters)
YV1AX845*C3375067

CONVERSION CHART FOR POPULAR ENGINE DISPLACEMENT SIZES

To calculate Liters from Cubic Inches, Take CUBIC INCHES x 0.01639 = LITERS

To calculate Cubic Inches from Liters, Take LITERS x 61.024 = CUBIC INCHES

Liters	Cubic Inches	Liters	Cubic Inches	Liters	Cubic Inches	Liters	Cubic Inches	Liters	Cubic Inches	Liters	Cubic Inches
1.0	.60	2.0	.121	2.9	.177	4.0	.242	5.2	.318	7.0	.429
1.0	.61	2.0	.122	3.0	.180	4.0	.243	5.3	.323	7.2	.440
1.1	.67	2.1	.126	3.0	.181	4.0	.244	5.4	.330	7.3	.444
1.2	.73	2.1	.128	3.0	.182	4.1	.250	5.6	.342	7.3	.445
1.3	.79	2.2	.132	3.0	.183	4.1	.252	5.7	.345	7.3	.446
1.4	.85	2.2	.133	3.0	.184	4.2	.255	5.7	.350	7.4	.454
1.4	.86	2.2	.134	3.1	.189	4.2	.258	5.8	.351	7.5	.455
1.5	.90	2.2	.135	3.1	.191	4.3	.260	5.9	.359	7.5	.460
1.5	.91	2.2	.136	3.2	.196	4.3	.262	5.9	.360	7.8	.476
1.5	.92	2.3	.138	3.2	.198	4.3	.263	6.0	.364	8.0	.488
1.6	.96	2.3	.139	3.3	.200	4.3	.265	6.0	.365	8.2	.500
1.6	.97	2.3	.140	3.3	.201	4.4	.267	6.0	.366	8.8	.534
1.6	.98	2.3	.141	3.3	.202	4.5	.274	6.0	.368		
1.7	.104	2.4	.143	3.3	.204	4.5	.275	6.1	.370		
1.7	.105	2.4	.146	3.4	.207	4.5	.276	6.2	.379		
1.8	.107	2.4	.149	3.4	.209	4.6	.279	6.2	.381		
1.8	.108	2.5	.150	3.5	.211	4.6	.281	6.4	.390		
1.8	.109	2.5	.151	3.5	.214	4.7	.285	6.5	.395		
1.8	.110	2.5	.152	3.6	.220	4.8	.292	6.6	.400		
1.8	.111	2.5	.153	3.7	.225	4.8	.293	6.6	.401		
1.8	.112	2.6	.155	3.8	.229	4.9	.300	6.6	.403		
1.9	.113	2.6	.159	3.8	.230	4.9	.301	6.8	.415		
1.9	.116	2.7	.164	3.8	.231	5.0	.302	6.9	.420		
1.9	.118	2.8	.169	3.8	.232	5.0	.304	6.9	.421		
2.0	.119	2.8	.171	3.9	.238	5.0	.305	7.0	.425		
2.0	.120	2.8	.173	3.9	.239	5.0	.307	7.0	.427		