# **VOLVO PENTA**

Volvo Penta of the Americas 1300 Volvo Penta Drive Chesapeake, Virginia 23320-9810

# **Parts Bulletin**

Group Number Version

P-00-0 3

02

### How to identify a Volvo Penta gas engine

Models: later model gas engines

Distribution: Parts Date: May-2005 Binder: Parts Replaces: VPA 51-900

To help you easily find parts and service information about our products, Volvo Penta has developed online search tools that are available only on our website, Partner Network. As an example, in April, 2005 we launched a serial number search for all engine and transmission products. You can enter the product's serial number and the system will provide you with all of the catalogs, manuals and bulletins that apply to that product. The system also provides links to online versions of these documents. New tools such as this are added perodically to make it easier for you to find information about the Volvo Penta products you are servicing. This is another way to insure that you have the latest, most current information about our products. Contact your dealer business specialist to sign up for the Partner Network.

The parts and service technical information is organized around the model names of the products. Each manual or catalog covers specific models (product names). Understanding these model names will help in finding the correct parts and information for the products, whether you're searching on-line or in paper publications.

The text that follows explains the model names used by Volvo Penta for gas engines.

Several methods have been used to provide the gas engines with unique model names. Some were based on horsepower ratings. More recent names are based on the displacement of the engine in liters. Each time the name was changed, it was due to some change in the parts content of the engine. Sometimes the changes were minor, sometimes they were major. The changes may or may not affect the parts that you need for a repair. The safest method is to always search with the complete model name.

There are three distinct periods of gas engine production, each with a different naming method. Each is explained below;

## Red Engines, early

Very early engines, built until the late 1980's, were named based on the displacement (early) or horsepower (later) of the engines. The name started with AQ (sterndrive engine), BB (inboard) or MB (inboard). Next came the number for the displacement or horsepower. Most of these also included a one letter suffix, for version control. An AQ271A is older (and different) than a AQ271B.

EXAMPLES: AQ260A, AQ171C, AQ200F, BB260A

These engine names then changed to a system based on displacement. The names were a three digit number, followed by a letter. The first two digits of the number represented the displacement. The 43 in 434A meant the engine was a 4.3L. The third digit was used for version control. A 430 and a 431 are both 4.3L's, however the last digit indicates there is difference between the engines. The numbers at the third digit were not always sequential. 430's were built before

2(3)

431's, however 432's and 434's were built at the same time.

The letter at the end was also used for version control and was sequential. A 500A was built before a 500B.

These engines went out of production in 1993.

EXAMPLES: 432A, 500B, 251A, 740B

Nothing in the names in either of these sytems relates in any way to years of production. Some of these engines were in production for less than a year, others for many years.

#### **Charcoal Engines**

These engines were built during the joint venture with OMC and were painted a dark charcoal color. They were usually named by long character strings that contain two numbers followed by a series of letters.

- · The character string starts with two numbers, which are the displacement in liters.
- · Next is a letter that indicates who made the base engine.

G=GM, F=Ford

· After that, one or two letters that note the fuel system and/or output.

L=limited, S=superior, X=exceptional, i or I=fuel injected (no I means carburetted)

· Then one letter for the steering system.

P=power steering, M=manual, X=Exact steering, I=inboard

· The next two letters are the most important for finding parts. These are random letter pairs called model designators that indicate the years of production for the engine. All parts information for these engines is based on these letter codes.

#### **Model Designators**

letter	years of
code	production
MD	1993-1994
HU	1994-1995
NC	1995-1996
LK	1996-1997
ВҮ	1997-1998
WT	1998-1999
EF	1999-2000

- · The next letter is also random and is used for version control. An "A" may not be the first version. A "C" may not have been built before an "S". An "S" in one engine's name may not mean the same thing as an "S" in another engine's name, especially if the engines have different displacements or production years. When needed this code is noted in the parts publications.
- · Some names have the letters "CE" at the end. This indicates the engine meets certain emmission requirements. The only service part affected is the ECU. These part numbers are noted when needed in the catalogs.

These engines went out of production in 2000.

#### **EXAMPLES**:

4.3GLPBYC = 4.3L, G=GM, L=limited output, carburetted (no i), P=power steering, BY=model designator, C=service code for version control

5.8FSiPNCACE = 5.8L, Ford, Superior output, injected, power steering, NC=model designator, A service code, CE=certified emmissions

- 7.4GLPHUS = 7.4L, GM, limited output, carburetted, power steering, HU=model designator, S service code
- 3.0GLMMDA = 3.0L, GM, limited output, carburetted, manual steering, MD=model designator, A service code

#### Red Engines, current

Beginning in 2000 the gas engines are painted red again. The naming system was also changed. The first part of the name is the same as the charcoal engines, up to the letters for the fuel system.

- · The two numbers are the displacement.
- Next is a letter that indicates who made the base engine. New engines have been added that use Volvo Penta's new Ocean Series sterndrives, these engines have an OS for this letter.
- · After that, one or two letters that note the fuel system and/or output.
- · For 3.0L only, there is an M or P for the steering
- · For Inboard engines only, there is an I after the lower case i.
- Then a dash (-) followed by a one or two letter suffix. This is the major change from the charcoal engines above.

The first letter is the version control, this is present on all models. –A is the first version, -B was the second version, etc... There is no link between the suffix and production years. All engines with –A were not built the same year. A 5.7GXi-B and a 5.0GXi-B

are not similar. A 4.3GL-D is newer than and different from a 4.3GL-C.

The second letter, if present is always an F, it notes that the engine is freshwater cooled.

#### **EXAMPLES:**

3.0GLM-C

4.3GXi-DF

5.00Si-E

8.1GXiI-B