High And Low Displacement Engines Essay, Research Paper

High & Low Displacement Engines

People often think bigger is better, but that s not always true. Cars that have bigger engines are said to be faster than those with small engine are, but an Acura Integra Type R can out accelerate a Ford Mustang GT easily. This may seem impossible until the differences in the design of the two cars are analyzed.

A stock Integra coupe is relatively light compared to the Mustang. The Integra’s four cylinder 1.8-liter engine produces about 195-horse power while the Mustang has a six cylinder 3.0-liter that produce about 250-horse power. It seems the Mustang is superior to the Integra but the Integra has its advantages. It’s four cylinder engine can rev up faster because it is smaller and since it is lighter than the Mustang, it does not need all the power and torque that a Mustang have to move it forward.

In a speed competition, the Integra would accelerate faster than the Mustang but the Mustang has a larger and stronger engine, which makes it possible for the car to maintain a high speed. In other words, the Integra would win in a 1/4-mile drag race but the Mustang would win in a race that s longer than a 1/4 of a mile. They can also be made to produce as much power as a large engine but the engine life would be reduced due to the stress.

The advantage of small displacement engines is that they are fuel efficiency and weigh less than larger engines. The small displacement engine can also be modified to gain more power but the engine life is also reduced. The larger displacement is stronger and it can handle more modification but it still cannot accelerate as fast as a smaller engine and it consumes a larger amount of fuel.

Both low displacement and high displacement engine has its advantages. An analogy that demonstrates this is a long distance runner and a sprinter. When racing a short distance the long distance runner will lose to the sprinter but in a marathon type race, the sprinter will lose. Like engines both type of runners are used for a specific purpose and neither is better than the other.