

# [Domestic vs import cars essay](https://assignbuster.com/domestic-vs-import-cars-essay/)

Cars with high horsepower ratings and front wheel drive experience a term known as “ wheel-hop”. This means that the front wheels do not feel the entire weight of the vehicle when power is applied so they are much easier to spin even on dry surfaces. All-wheel drive allows equal distribution of power over the car which allows it to accelerate faster that the previous two setups, but at higher speeds the engine cannot exert enough output for all four wheels to spin as fast two wheels could while using the same amount of power. So when comparing power, ear is better than front wheel drive and all-wheel drive allows for faster acceleration to a point, but eventually slows the vehicle down. Let’s take one domestic and two import cars of the same approximate price value when brand new and compare power. The cars chosen are all popular power plants by consumers for racing and modification. The 2002 Chevrolet Camaro is the American contender at approximately $26, 000 (brand new in 2002) against the 2004 Mitsubishi Evolution at roughly $33, 000 and the 2005 Honda Accord V6 at about $27, 000 new.

The Camaro is rwd (rear-wheel drive) with 320hp (horsepower) to the engine. The Mitsubishi is awd (all-wheel drive) with 276hp, and the Honda is fwd (front-wheel drive) with 240hp. As the cars sit stock, which one is the fastest in the quarter-mile race? How about top speed? Here are the stats when driven by professional drivers: the Camaro is capable of 12. 9 seconds in the quarter-mile, the Evolution is capable of approximately 13. 3, and the Accord is around 14. 9. The Evolution is surprisingly almost as fast as the Camaro because of its awd and the short distance of a quarter-mile race.

If the race had gone any longer, the Camaro would keep pulling away because the engine only has to push two wheels. This applies to the Accord as well. Even though its front wheel drive hurts traction in the short quarter-mile race, the Accord would most likely catch the Evo because it has to push only two wheels in a longer race. When it comes to power, tally one for the domestics. Keep in mind that very few Japanese cars make anywhere near 300hp in stock form. What about modifications? Which car is more mod-able, the import or domestic?

This will be answered shortly, but first, let’s look at the outcomes of modifying our stock examples. A common method of adding extremely large amounts of power to any car, import or domestic, is by applying a turbo charger. Many of you have heard of a turbo charger, but what does it do? An engine uses fuel combustion to pump its cylinders to produce power. The more air that is in the fuel mixture, the bigger the bang becomes. A turbo charger forces so much air into the mixture in a compressed form that it makes the explosion big enough to increase horsepower anywhere from 50-150% depending on the setup.

Very often people apply these setups to their Honda Accords or Civics to reach the same potential as a 320hp Camaro, and very often these results are achieved. But wait, what if we take that same 320hp Camaro, and add the same turbo setup to it? Another factor in the amount of power added by the turbo is the engine’s size. The smaller the engine, the more compression is required to obtain large horsepower numbers (the higher the boost number equals the height of compression). The more cylinders an engine has also works as a multiplier to the compression that is added.

Let’s say that the Accord adds a turbo setup at 15lbs of boost and reaches a hp level of 420. This is a 75% power increase. Let’s take that same setup and put it on our 320hp Camaro. If we obtain the same 75% increase, the new number is 560hp, but since there are two extra cylinders, the increase will most likely be much more. So the addition of the same parts yields a better increase for the domestic V8. You may be asking “ what if we did this turbo setup to the Evolution that had 274hp to start with? , and that is a very good question and here is the answer: The evolution is a 4 cylinder car that is already turbocharged to reach its 274hp rating. To increase these extremely elevated numbers, we would have to crank up the boost numbers tremendously. Keep in mind that the more compressed air that is added to the engine, there is a more increased risk of a blown engine, so a domestic V8 could turn down the boost level and still show increased numbers equal to those of the import while being much safer.

With that said, let’s get back to the simple question of which one is more “ mod friendly”. Both domestic and imports have relatively endless parts that can be added to increase power and performance, but as shown above, the bigger engines will simply respond better. An import needs to put a lot of money to reach the numbers that domestic sports cars put down, but if the domestic spent that same amount of money, it would simply pull away without comparison. Tally another one for domestics.

Moving on to the drag strip and the road course comparisons we find that the playing field is leveled out a little more. Traditionally, domestics are set up for the drag strip, and imports usually perform better in the “ twisties” because of their fwd and awd setups. Although there are domestic cars like the new Z06 Corvette that outperforms imports of prices ten times its own in every field, most domestics fall to the lap times of imports of close horsepower ratings. Likewise, domestics usually outperform imports on the strip when both are similar in horsepower ratings.

We will split this one down the middle, half a point for both parties. Any car can be made fast, as you can see, but it all depends on how much you want to spend. The price of these cars and their modifications is the final test. The results are not extremely surprising. The year is 2006, and a 2002 Camaro described above can be found for as little as $10, 000-16, 000. If looking for an older import in that same price range, all you will find is something with even less power than the 240hp Accord as described above.

Imports have just recently started to increase their power numbers. Thus, much higher prices are going to be paid to find a comparable platform to start modifying. Start adding the price of modifications and we have got a domestic sports car still under $20, 000 capable of mid ten second quarter mile runs and an import most likely three times the cost of this just to even be close to the same numbers. Score another for domestics. That final test concludes the tally scoring. The final score is 3. 5 against . 5 with domestics winning.

Their superior power, rear wheel drive setups, and lower prices for both initial cost and cost of modification easily overtake import models who strive for the same type of performance. Keep this in mind the next time you are out looking for a new sports car. Yes, all of these imports have fancy stereo systems, but not even the loud music in your ears will prevent you from crying when you see the car that cost a third of what you paid passing you, as you lose the race you challenged your friend to with the cheap Camaro..