# **Power isn't all the same** THE DIFFERENCE BETWEEN HORSEPOWER AND TORQUE

# anufacturers love to boast about numbers when they sell trucks — the pounds they can haul, the fuel efficiency of their engines and their tow ratings for pulling a trailer.

For every company, though, the two most important numbers seem to be horsepower and torque. Every brand wants bragging rights for having the highest horsepower or the greatest amount of torque, even though many buyers may not know the difference between the two. So, which one is better? Horsepower or torque? It all depends on how you use your truck.

## TORQUE: TWISTING FORCE

Torque is the twisting force that your engine creates. In extremely simplistic terms, this is the force that helps your truck accelerate from a stop, pull a trailer or climb a steep grade in the mountains. In other words, if you do a lot of towing, torque is the most important power figure to look at. It's going to have the biggest impact in your day-to-day experience because this is the force you feel most when pulling a heavy load.

#### HORSEPOWER: WORK MEASURE

Horsepower, on the other hand, is a measure of work. It's an approximation from the era of steam engines that estimates how much work a horse could do in a given amount of time.

Horsepower is the force that will keep you cruising on the highway or accelerate under normal conditions. If you don't use your truck to do much towing, or if you like to race quickly from one place to another, horsepower is the number you should pay most attention to because it's a factor in more ordinary driving — not just starting from a standstill.

## IT'S MORE COMPLICATED

Of course, anything involving physics is difficult to boil down into simple English. If you search the Internet about torque and horsepower, you'll find countless arguments about which one is better. Every truck enthusiast has an opinion, it seems.

That's also because power, when reduced to a single number, is always going to be an inaccurate reflection of an engine. It's typically advertised as "peak" horsepower achieved at a very specific engine speed, or RPM.

In the real world, your engine will never spend much time at that one particular engine speed, so it matters a lot more how smoothly the torque or horsepower is spread out over a wide range of RPMs. A truck's performance is also changed drastically by its transmission and gear ratios.

That's why it's far better to pick a truck based on a test drive than it is on a single, albeit impressive, torque or horsepower number.

# **MORE THAN NUMBERS**

When shopping for a truck, you've got to look at a lot more than the horsepower and torque figures. The transmission, gear ratio and other factors will make a big difference in the performance you can expect to get from your truck — from how well it tows to how much fuel it uses while doing its job.