Spec-Tow-Analysis

By Howard J. Elmer

Arming yourself with information will help you choose the right tow vehicle.

Studies by manufacturers have shown that recreational towing needs are a serious consideration in more than 20 percent of new vehicle sales. But, despite the size of this market many dealerships offer very little in the way of information (other than what comes in the brochure). If a new tow vehicle is in your future you'll need to research specific features before you get to the dealer, because chances are you'll know more than the salesperson will. But, apart from checking out the vehicle's specs make sure you know what it is you are towing; what it weighs and what kind of geography you'll be covering regularly with how many people and how much stuff on board. Come up with a generous number for the combined weight and use it when looking at potential purchases.

You'll need power to move all this stuff so horsepower is important but torque figures are more so. The simple way to know how much power you need is to check out the OEMs suggested tow ratings - they have gone to the trouble of coming up with safe weights for their vehicles. If these figures suggest you are near the limit for your needs, a little larger is better - specifically because less strain equals longer powertrain life.

Keep in mind that the hardest part of towing is to get that initial mass moving - once it's at speed it requires only a fraction of the available power to keep it moving. Another item that can help create torque (or fuel savings) is a choice of axle ratios (the rolling difference between a 3.92 or 4.10 rear-end will affect fuel mileage, speed and torque) to best utilise the available rpm.

Now consider the vehicle itself. First look at the human element. Will everyone fit, with their stuff comfortably? If the answer is no, move on. If it's yes, consider the rest of the vehicle but be careful, contrary to popular belief big, tall, beefy vehicles do not make good tow vehicles. In fact, what you want is a long wheelbase with a short overhang, a low centre of gravity and low-profile stiff sidewall all-season radial tires. All-wheel drive is the best traction choice (but is hard on fuel), followed by front-wheel drive - rear wheel drive is the least effective.

Overhang is measured from the rear axle to the hitch ball. This measurement is then taken as a percentage of the total wheelbase - anything less than 35 percent of the total is a good ratio - with less being better. The simple reason is that more weight is transferred directly to the rear axle. A low centre of gravity usually comes with stiffer suspension that will allow less side-to-side motion in cross-winds. This situation can also be helped (or aggravated) by the tires.

The two things to watch for here are the type of tire and the width in relation to the

rim width. A low-profile tire that doesn't bulge over the rim will give you much better steering feel and control. As for handling weight, check the tires to see if they are stamped with either a "P" indicating passenger car or and "LT" meaning light truck. The difference is in the sidewall stiffness and the weight capability. Depending on the load range LT tires can carry upwards of 60-psi versus 35-psi in the same size P-tire - and buying a truck or SUV does not guarantee that you'll get LT tires as OEM standards - but you may be able to specify them when you order.

If the manufacturer offers a factory towing package, seriously consider it, if for no other reason than the electrical connections. Getting this wiring installed aftermarket (particularly if there is an electric brake controller involved) can be maddening; this is so much easier when done at the factory level.

Other things to look for in an OEM tow package are beefed up components and capacities to offset excess heat and electrical draws. Look for a heavy duty battery, alternator and signal light circuitry, a transmission oil cooler, larger radiator with increased cooling capacity and the most important thing - a hitch that is attached to the frame and is of the right weight class. Class I - up to 2,000-lb; Class II - up to 3,500-lb; Class III - up to 5,000-lb. and Class IV - up to 10,000-lb. (Fifth wheel hitches are set up differently.)

If you can specify larger than standard brakes, it's a good investment. Along with this enquire as to engine braking capability of the engine. This feature is usually available on diesel engines but many new gasoline motors now have higher compression that, combined with downshifting, can save your brakes and control your trailer in downhill situations (that's why the transmission cooler is a good idea).

To Often too much emphasis is put on the need for 4WD when it comes to towing. Though it can
be important, you'll find that 4WD is most useful during the first 100 and last 100 metres of your trip when you are pulling a trailer out of the mud, grass or water and when you need to park it. Otherwise, most of the time for driving on clear, paved roads you won't use it and if you do, you're wasting fuel.

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