The Extra Mile

Engine Building and Power Techniques

BY SCOTT SEHR

Sehr Performance Machine

Absolutely, The Most Motor For Your Money! Guaranteed

Cam It Up

The camshaft is the heart beat of an engine but it can only do its job effectively if it is designed to work with the related engine components. There are so many options when it comes to camshafts, that it can overwhelm a person. The list of things to take in to consideration include: the efficiency of the carburetor or injection, intake design, cylinder head design including velocity and flow, exhaust system, vehicle weight, effective operating RPM range, rear end gear, tire size, torque converter stall speed, and transmission. Two of the biggest mistakes in a self engineered engine are using too big of a camshaft and too much carburetion. Choosing a camshaft that will work best with an engine combination should be left up to an experienced engine builder or cam engineer so all of the engine's components can be accounted for when making the choice on a camshaft or camshafts for the overhead cammed engines. Quite often the person on the order desk has no clue what will work and simply suggests a part number that has been given to them to sell with some general application guidelines. Unless you are really lucky, this is not the route to take to get the most out of your engine build.

Camshafts have come a long way in the last 20 years. Profiles have become more aggressive and have better designs for more engine efficiency. Designs can be found in hydraulic flat tappet, solid flat tappet, solid roller, and hydraulic roller camshafts and lobe profiles can be symmetrical and asymmetrical designs. Symmetrical lobe designs have the same ramp profile on the opening side and the closing side. Asymmetrical lobe designs have a more aggressive opening side and a less aggressive closing side. Each design has it's advantages but only if used in the correct application. Here at Sehr Performance, we have extensive experience in choosing the correct camshaft for the engine and the engines use by utilizing years of experience, computer engine trend testing, and a personal relationship with camshaft designers and engineers. The right camshaft for the desired application is only one of the reasons that our engines make the power and torque that they make and our customers are pleased with what they have instead of wondering what is missing. If you find yourself at that stage in your own engine build, come in and let us help you get the right cam for your combinaton.

Choosing the correct camshaft for your engine is one step in an engine build. Next month we will try to remove some of the mistery involving camshaft geometry.

At Sehr Performance we're here to help you get the most out of every dollar that you spend and all the Extra Miles that come with making the right choices for your next engine.

722 E. 8th St. | Sioux Falls, SD | 605-334-4191 | sehrpower.com | sehr@sehrpower.com