THE EXTRA MILE

Engine Building and Power Techniques

BY SCOTT SEHR

Sehr PERFORMANCE MACHINE

Absolutely, The Most Motor For Your Money! Guaranteed

What Goes Around Comes Around

Another component not given the consideration deserved is bearings. When building a hot rod engine, bearings are one of the components that many engine builders choose to go light/inexpensive on to save some money and it has been proven countless times to be unwise. Bearing materials and manufacturing techniques have come a long way over the years so durability and reliability can be had if you make the right choice. The performance engines of today are making more torque and horsepower than ever before so careful consideration of your bearings is in order.

Often the choice made for cam bearings is stock, but with the cam profiles and spring pressures used in current performance builds they are not up to the task. Many engines have come into my shop with worn out cam bearings and a statement of 'I don't have much run time on it at all'. Better bearing design and materials are needed to stand loads up to three times those present in a stock configuration. Moly coated bearings provide lower friction should the oil flow be interrupted. Proper bearing press or crush into the block provide the correct vertical oil clearance for the engines use. Too much clearance and you get low oil pressure, too little and bearings gall, power is lost and engine failure is headed your way. In order to give all of the above a chance to work like they should the cam bore has to be addressed and can be corrected by align boring the cam tunnel and installing over sized cam bearings. There is more to this than just sticking in a set of bearings.

Rod and main bearings also take quite a beating in our performance engines. As compression ratios horsepower and

Standard bearings in front
King HP coated race bearings in back

RPMs climb the demands also increase. Choosing the right bearing includes its structural integrity, intermediate layering, bearing overlay material, adhesion qualities, oil grooving, oil hole placement, eccentricity/concentricity, crush and wall thickness variations. We'll get into these issues a bit deeper in the next issue.

At Sehr Performance we use extreme performance bearings in all of our hot rod engines so our customers experience the power, torque and reliability in each "EXTRA MILE" that they enjoy.

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