

Using Valve Lash to Help Tune the Engine

The engine only responds to the actual movement of the valves. Since the valve cannot move until all the running clearance (valve lash) has been taken up, the amount of valve lash you use affects the engine's performance.

If you decrease the amount of (hot) valve lash, for example, the valve will open slightly sooner, lift higher and close later. This makes the camshaft "look" bigger to the engine, because of a slight increase of actual running duration and lift.

If you increase the amount of (hot) lash the opposite occurs: The valve will open later, lift less, and close sooner. This makes the cam appear smaller to the engine, with slightly less actual running duration and lift. You can use this method on a trial basis to see what the engine responds to and keep the setting that works the best. Just remember, the more lash you run, the noisier the valve train will be. If the clearance is excessive it can be harsh on the other valve train components.

Therefore, for prolonged running of the engine we do not recommend increasing the amount of hot lash by more than +0.004" from the recommended setting; also, we do not recommend decreasing the hot lash by more than -0.008".