Stamped Steel Rocker Arm Break-in and Operation

The AERA Technical Committee offers the following information on stamped steel rocker arm break—in and operation. This bulletin is supplied as information only and is not an endorsement of any particular product. Specific products are used for this information and adding/using different products may produce unwanted results.

Many classes of racing require the use of stamped steel rocker arms, and many budget crate engines utilize stamped steel rocker arms. Because stamped steel rocker arms do not feature a roller bearing pivot, stamped steel rocker arms generate more friction. As a result, improper break-in and operation can dramatically shorten the life of stamped steel rocker arms. This technical bulletin provides recommended steps and specific products to prevent failures and extend the life of engines utilizing stamped steel rocker arms.

It is recommended to pre-lube the inside cup of the rocker arm with engine assembly grease (Driven Part #00732). After installing the rocker arms and setting the valve lash, pour break-in oil (Driven Part #03706) over the rocker arm assembly (16 ounces per side on V8 or V6 engines). Then after doing so, immediately start the engine.

1. Upon start-up, bring the engine speed up to 2,800 RPM and hold steady for 10 minutes.
2. After 10 minutes, shut down the engine, and allow the engine to cool down for 10 minutes.
3. Restart the engine, and bring the engine speed back to 2,800 RPM for 10 more minutes.

The rocker arms are now properly broken-in. If the engine features flat-tappet lifters, this same procedure is recommended. To maintain proper protection, it is recommended to use synthetic motor oil (Driven Part# 03206). Conventional motor oils, even high zinc racing oils, DO NOT provide the
required friction reduction needed to properly protect stamped steel rocker arms. Endurance testing shows that synthetic motor oil reduces oil temperature, wear and friction.