

Due to the EPA's mandate for zinc removal from most motor oils, proper flat tappet camshaft break-in procedure is more critical than ever before. This is true for both hydraulic and mechanical flat tappet camshafts. As a point of interest, the most critical time in the life of a flat tappet camshaft is the first 30 minutes of "break-in" during which the bottoms of the tappets mate with the cam lobes.

We suggest using Driven Racing oil BR 30, which is a flat tappet specific break in oil. We recommend running this oil for the prescribed 30 minute break in period as well as the first 500KMs of driving time. After the first 500KMs we recommend switching to Driven HR2 hot rod oil or equivalent.

CAUTION: We do not recommend the use of synthetic oils for "break-in" because they are too slippery. This characteristic reduces the tendency of the lifter to rotate on the camshaft lobe and mate properly.

DO NOT use synthetic oil until at least 2500kms.

If possible prime the oiling system before starting the engine. When priming, rotate the engine at least one complete revolution to assure oil gets to all valve train components. Preset the ignition timing to start the engine at a fast idle. It is important that the static ignition timing is as close as possible and if the engine has a carburetor, it should be filled with fuel. The engine needs to start quickly without excessive cranking to ensure immediate lubrication to the cam lobes. Try to minimize the number of times that you rotate the engine, as this can displace the moly paste from the lobes and lifters.

Start the engine and immediately bring to 2,500 rpm. Timing should be adjusted, as closely as possible, to reduce excessive heat or load during break-in. Get the engine running fairly smoothly and vary the engine speed from 1500-2500 RPM in a slow, to moderate, acceleration/deceleration cycle. During this time, be sure to check for any leaks and check out any unusual noises. If something doesn't sound right, shut the engine off and check out the source of the noise. Upon restart, resume the high idle speed cycling. Continue the varying "break-in" speed for 20 - 30 minutes. This is necessary to provide proper lifter rotation to properly mate each lifter to its lobe. Should the engine need to be shut down for any reason, upon re-start it should be immediately brought back to 2500 rpm and the break-in continued for a total run time of 20 – 30.

Failure to follow this break-in procedure on engines equipped with flat-tappet cam shafts may result in premature failure of the camshaft and associated parts, and may also void your engine's warranty.

Call us immediately if you notice anything out of the ordinary! (604) 757-2761

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