

SBD Motorsport

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SBD Motorsport Running in Procedure For Car Engines only (not motorbike engines)

Use running in oil (OIL-EN-RP-BR-IN-10W30-01)

Prime Drysump pump with drill to get oil pressure up - typically 30 psi - prior to first firing.
Initial fire up is to bed the cams in, see procedure below;

When fitting new camshaft it is important to follow the running in schedule as follows:

One minute - 2000 RPM
One minute - 1500 RPM
One minute - 3000 RPM
One minute - 2000 RPM

If this schedule is not followed then damage to your camshafts will occur, maybe not now but in the near future.

If Cams are being run in on a new build, it is extremely important to get the engine started, and the revs increased to the first stage listed above, do not attempt to balance the butterflies first, a visual balance of the butterflies before fitting is the best that can be done at this time, if the engine is allowed to idle on new cams damage will occur.

Take the revs up to 2000 rpm using the throttle stop screw, if the mixture seems particularly bad at this point, rotate the throttle pot slightly until the engine sounds "happier", follow the rest of the procedure listed above.

Once complete the idle can be set, but again do not concentrate on this for too long, it is more important to get the engine under some gradual load as soon as possible, rather than getting the idle perfect at this point.

The idle can be set last.

In garage running, no more than 3k rpm initially, keep the engine changing RPM - don't let idle or sit at any constant revs.

Once happy and if all seems ok and the engine has some temperature, increase the throttle blips, going to half max rpm under no load is safe and better to bed the engine in at; ideally the engine should now be put under load by controlled driving or rolling road work.

Under load work;

Once oil temp begins to come up use more revs, let the engine accelerate through rather than hold the load for too long at any one point, the technique is to run the engine through the peak of the torque curve without either over revving or allowing the engine to labour, use all gears 'squeeze' of throttle, try to do about 20 mins worth of running with RPM limit of half max revs, however once oil is up to temp continue same process but holding the lower gears to build up to 3/4 max revs at the end of the running in session, total time 45mins.

When complete drain all oil, fit new filter and fill tank with fully Synthetic oil (Type as per our data sheet).

Build the engine load while fine tuning the mapping, use 7/8 of max revs initially, once the map is being optimised and temperatures/pressures are good increase through to max revs.

This procedure can only be used as a guide, we will not take responsibility for any damage caused, it must be remembered that under certain conditions the procedure may need to be altered, and ultimately the responsibility lies with the engine operator.



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