

Addendum: Additions and Corrections to “Engine Tuning” article (Part III)

OMC encourages its members to consider Opel engine rebuilds — particularly during the Winter season (it's a good reason to organize and use the garage, a good entertainment alternative to TV programming, and possibly even a good use of the extra free time that economic volatility can provide).

Additional OMC Blitz submissions on this topic, drawn from your own experiences, are also welcomed.

Clarification of Sept/Oct 2007 OMC Blitz “Engine Rebuilding” Vol. 27, Issue 5

(Part by part, in page number order):

President's Message: (page 3): To his credit, the 2007 OMC Motorsports Rep did has draw on the available officer's membership subsidy (past Motorsports Rep's did).

Camshaft Base Circle: (page 11)

The arrow on image (top of page 11) pointed too low. The corrected image is at right.

Adjustable Camshaft Sprockets: (page 11)

Variable sprocket designs, also known as a "Vernier Pulley," are sold by Kent (part #S14), Piper (part #PULSOP, photo at right) of England, and Risse of Germany (part #80.000.017) Note: 7 degrees of cam timing advance increases low-end torque, as was recommended in the July 1993 Blitz.

Upper Engine Component Diagram: (page 12)

Part #185 on diagram (a washer?), isn't used on any 1.9 engine we know of.

1976-1991 Valve Head Dimensions: (page 15)

Width of 2.2L Intake Valves is 45mm (not 48mm as printed)

Pistons & Rods: (page 17)

While European 2.2 & 2.4 pistons are the same 95mm width as 2.0's, they have different wrist pin mounting locations and are not interchangeable.

Pistons & Rods/Performance: (page 17)

The separate ring of a “3 piece set” of piston rings is the bottom ring position (not middle)

If Chevy V8 pistons (from the 265 or 305 engines) are installed in an Opel, these should be the high-RPM "silicone treated" versions (not the cheap "cast" type that is widely retailed). This is for performance durability, because Opel 1.9's rev higher than Chevy V8's.

Crankshaft: (page 19)

The front crank pulley rotates clockwise (not counterclockwise).

Crankshaft: (page 19) Sealing of the Main Bearing Cap, is indicated at points “A” and “B” (in image at right).

Crankshaft/Performance: (page 19) Installation of a 2.2 crankshaft and pistons in a 2.0 block to achieve increased stroke, can avoid machining work on a stock 1.9/2.0 crankshaft (but other machining, like modifying piston skirts for clearance, may be needed). With higher crankshaft profiles, some grinding at the cylinder bottoms may also be needed to provide sufficient crankshaft clearance.

Timing Chain Cover: (page 20) To hold a tensioner rail in position, the thread should be routed out the thread hole of the tensioner (when the timing cover is placed into position). Also, 2 tensioners are attached to the timing cover on shafts and secured with circular pins (not with bolts). The "early" 10-bolt timing cover top sits lower than the engine block (requiring a thicker gasket and additional sealer at the junction, as seen at right), compared to "late" 12-bolt style covers (which are more even with the top of the engine block surface).

Oil Pans: (page 21) Dipsticks may have changed for 1974, with engine #19S-1078740.

Alternator Brackets: (page 21) Early lower brackets were made of cast iron, not steel.

"Opel Wasp" Vehicle Profile: (page 23) Note: The cylinders were bored out .10", (not .50" as listed).

Also Strongly Recommended: Use “ZDDP” additive in engine oil (to protect lifters)

Additional Engine Specifications/Details appeared in March/April 2008's Blitz issue.

