

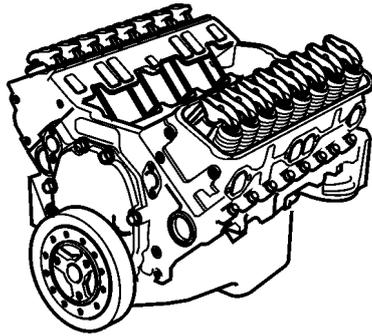
### Priming the oil system, remanufactured gas longblocks

Gas engines 4.3, Gas engines 5.0, Gas engines 5.7

Binder: C

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**NOTICE!** Failure to follow these instructions will result in engine bearing damage which will not be covered by warranty.

Remanufactured longblocks must be filled with oil and primed before use.

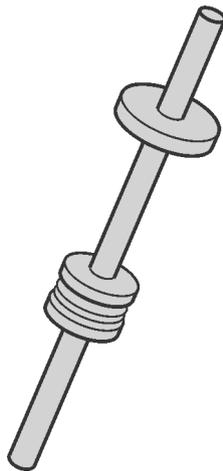
The entire lubrication system must be primed; the block's internal oil passages and the filter and all hoses and housings mounted to the engine. If the engine is equipped with a remote oil filter, install the complete system on the longblock before priming the engine. For earlier engines install the correct oil filter on the block. Pre-fill the oil filter with oil. Install the dipstick and tube assembly. Reminder; all reused components must be thoroughly cleaned prior to assembly.

Do not install the valve covers or distributor until after priming has been completed.

Fill the longblock with the oil specified in the Operator's Manual. Make sure the engine oil level is correct on the dipstick.

Install a mechanical oil pressure gauge to the oil gallery at the rear of the block (behind intake).

Priming should be done with a Melling PT13 priming tool, or similar. The lower collar on this type of priming tool directs oil flow to both banks of cylinders. Do not prime using only a shaft to turn the oil pump. The PT13 should be installed in a 1/2" drill motor. Follow the instructions included with the tool.



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Insert the PT13 in to the distributor hole and engage on the oil pump shaft. Using the drill, rotate the tool clockwise. During priming, loosening the oil filter until oil reaches the filter may prevent an air pocket and assist in priming. While you are priming the engine, have someone else rotate the crankshaft clockwise by hand to send oil throughout the engine and to all bearing surfaces. Prime engine until oil is flowing from all push rods and is dripping from the rocker arm. Oil pressure gauge should show at least 40psi.

Also, prime the engine if it sits for extended periods of time. Reinstall the distributor in the same orientation as it was removed.

A video of the priming procedure can be found at:  
[http://www.volvopentatraining.com/video\\_library/longblock\\_oilpriming/](http://www.volvopentatraining.com/video_library/longblock_oilpriming/)