

A ENGINE OIL MODIFICATION

In an A engine with a solid or roller lifter cam, we highly recommend installing the Chrysler P4120603 lifter oil block off tube kit. Regardless of whether you use a hydraulic, solid, or roller cam, we recommend the following modifications.

Purchase an 8" to 10" long 9/32 drill bit. Remove the main caps. On the mains number 1-2-3-4 there is an oil passage which goes from the top on the main saddles to the lifter galley on the passenger side on the block. Slowly drill these 4 passages to 9/32". Cast iron is very hard to drill without the bit trying to hang up, so do not try to rush this job. If you happen to break the bit, you will have real problems.

Take your oil pump and drill the neck of the pump (the section between the rotor and the main cap) 1/2" Take a sand paper roll (the kind used in porting heads) and go in the pump above the rotors and debur and slick the area above the rotors. You will need to slick the hole in the pump neck that you have drilled also. Drill to 1/2" the rear main cap where the oil goes through and polish with sandpaper roll.

You will need a 10" long 1/2" drill bit for the next step. With the rear main cap removed, look in the hole where the oil goes into the block. There is a 9/16" freeze plug which diverts the oil through the oil filter. Remove this plug by inserting a 1/4" rod through the hole where the oil pressure gauge goes in the top side of the block. Drill the hole 1/2" up to the lifter galley where the plug was removed. Remove the oil filter and any adapter plates from the block. Remove the pipe plug from the block that is under the filter. Drill to 1/2" both holes that go from the filter to the passage that leads the lifter galley. Now remove the pipe plug in the rear of the block behind the oil filter and drill this passage to the center of the oil filter bolt 1/2".

DO NOT DRILL PASSAGES FROM THE MAINS TO THE CAMSHAFT. DO NOT RESTRICT THE OIL TO THE ROCKER ARMS.

Once all passages are drilled, completely clean the block very well. We use Milodon #34010 brush kit to clean all the oil passages. Once the block is clean, replace the 9/16" plug that diverts the oil to the filter and the plug under the oil filter. If you make the above modification, you have greatly increased the volume of oil that feeds the crankshaft and the bearings of your A engine.

We highly recommend the Milodon 10 quart oil pan with the swivel pickup. This system comes with a pump cover and a 1 1/4" rotor. Using the long rotor greatly increases the oil volume. The swivel pickup makes sure there is always oil at the pickup. Also use fully grooved (wide groove) main bearings. We do not recommend stock type oil pans that have been cut and deepened as these pans can run out of oil under acceleration or deceleration. They are not baffled properly. While the cost of a good oil system is expensive, it is not nearly the price of a new engine.