

The B-1000 "Liquid Mechanical" polymer was developed to clean your engine without the need to open it, avoiding high maintenance costs like; overhaul of the engine and mechanical work. The B-1000 "Liquid Mechanical" polymer will provide you several benefits and the most important one is the extended life of your engine.

Caution: Before starting the cleaning process, have your personal protective equipment and a container for the disposal of the waste that will be generated throughout the process. The final residues should be dumped on an authorized collection point as; Fuel stations, Auto shop or Recycling Centers.

Step 1. If the engine is cold, start the engine for **5 minutes** to warm up the oil to be removed; if the engine is hot, wait for **30 minutes** to avoid burns while removing the hot oil from the crankcase.

Step 2. Remove the top engine oil cap from the main oil filler on the engine.

Step 3. Find the oil pan under your car and locate the oil plug; use the correct wrench to loosen the plug and a container to storage the old oil.

Step 4. Before removing the plug from the oil pan, make sure the storage container is in the correct position to avoid oil spillage on the ground; drain the oil for **5 minutes** until the oil pan is completely empty. Now replace the drain plug gasket and reinstall the plugin using the wrench, don't make it too tight.

Step 5. Mix the polymer and water in equal parts, **50% polymer** and **50% water** in a single clean container and to proceed with the mixing, you can use a clean wooden stick or a PVC pipe to mix it doing a continuous movement for about **3 minutes** until the mixture is homogenized.

Step 6. Fill the engine sump with the mixture performed in the previous step of number **(5.)** obtaining the maximum oil level recorded on the engine inspection dipstick. Dipsticks are marked with the optimal level. This can be indicated with a pair of pinholes, lines marked MAX (for maximum) and MIN (for minimum), the letters H (for high) and L (for low) or a crosshatched area on the dipstick. If the solution is within the crosshatching, between H and L, between MIN and MAX, or between the pinholes, then your solution level is acceptable. If the solution does not reach the L, MIN, crosshatching, or lower pinhole, you will need to add more solution.

Step 7. Screw the oil filler cap back on and start the engine for **15 minutes**.

Step 8. After running the engine for **15 minutes (7.)**, turn off the engine and remove the top oil fill cap. Underneath the car remove the oil plug and drain the dirty solution of water and polymer generated in the decarbonization process.

Step 9. Repeat the previous steps **(6.) (7.)** and **(8.)** however run the engine for **25 minutes** instead.

Step 10. Repeat the previous steps **(6.) (7.)** and **(8.)** however run the engine for **35 minutes**.

Step 11. After running the engine for **35 minutes**, step number **(10)** turn off the engine and remove the top oil fill cap from the engine. Using a wrench remove the oil plug from the oil pan.

Step 12. After performing the 3 (**15 minutes, 25 minutes and 35 minutes**) sessions on steps **(8), (9)** and **(10)** drain completely the liquid generated in step **(5)**.

Step 13. Now replace the drain plug gasket and reinstall the plugin using the wrench. Add 50% of the normal oil capacity of your car. Remove the filler cap above the engine of the car. Position the funnel at the opening point. Check the correct oil capacity in your car's manual. Remember that the right volume of oil will be indicated on the inspection dipstick between the maximum and minimum level. Make sure the oil mark is in the middle of both marks.

Step 14. After completing step **(13.)** place the top oil cover in its original state and run the engine for 10 minutes.

Step 15. After running the engine for **10 minutes**, turn off the engine and remove the cap of the engine oil filler. Loosen the oil pan bolt and remove the used oil. This oil should be discarded together with the collecting container used in the cleaning process. The residuals should be taken to a collection point.

Step 16. After completing step **(15.)** replace the oil filter used during this decarbonization process with a new oil filter and fill the crankcase to the maximum level on the inspection dipstick. Use the oil recommended by the engine manufacturer. Turn on the vehicle for **2 minutes** then turn it off and wait for **5 minutes**, now read again the oil dipstick and make sure the oil is on the maximum level.

Attention:

The engine cleaning or decarbonization process can be performed every **30,000 miles**.

The decarbonization process will keep your engine clean and free of impurities, providing a longer life to your engine. You can get several benefits from this process as: reduction of pollutants generated by the internal combustion of the engine and a “healthy motor” equal or close to an engine that is leaving the manufacturer for the first time.