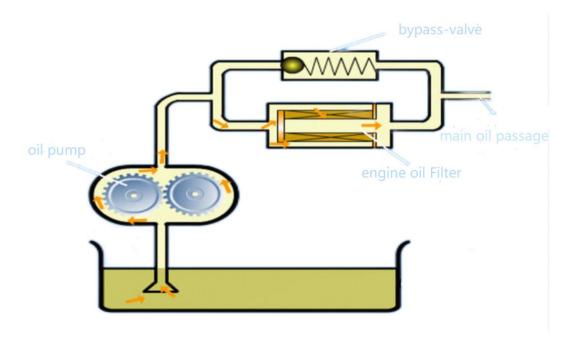
## Oil filter

The oil plays a role in lubricating the engine during the operation of the engine. The oil lubrication process is easily mixed with impurities such as dust, carbon deposits, and metal particles. In order to reduce these impurities and improve the cleanliness of the oil, the oil filter has become an indispensable existence.



The oil filter is located between the oil pump and the engine lubrication parts. According to the different connection methods, it is divided into full-flow filter and split-flow filter. The full-flow filter is connected in series between the oil pump and the main oil channel to filter all the oil entering the main oil channel. Generally, impurities with a particle size of 0.05mm or more are filtered out. The split-flow filter is connected in parallel with the main oil channel to filter part of the oil sent out by the oil pump and filter out impurities with a particle size of 0.001mm or more. Both have advantages and disadvantages. The full-flow filter is more widely used.

The principle of the oil filter is that when the engine is working, the oil pump extracts the unfiltered oil and pressurizes it through the filter inlet. Under the action of pressure, it is filtered by the filter paper of the filter. The impurities in the oil are adsorbed on the filter paper. The filtered oil enters the center tube and then flows into the main oil channel through the oil outlet to clean and lubricate the engine. The oil filter also has protection measures to prevent the oil from not flowing due to the accumulation of impurities in the filter paper. The principle is that

when the impurities in the filter paper exceed the dust holding capacity, the oil is blocked when passing through the filter paper, thereby opening the bypass valve of the filter to enter the center pipeline, ensuring that the oil can pass through after the filter paper is blocked. However, the filtering effect of the filter will be lost at this time, and the filter needs to be replaced in time to ensure the normal operation of the engine.



Things to note during the installation of the oil filter: There will be directional marks on the standard oil filter, and only when it is installed according to the marks can the oil filter function normally; before installation, you can apply lubricating oil on the filter seal to facilitate the installation of the filter, and also facilitate the sealing of the filter to make it play a better role; the oil filter needs to be replaced regularly. As impurities in the oil are constantly adsorbed, the effect of the filter will gradually deteriorate. If the filter is not replaced, impurities will pass through the filter and cause damage to the engine. It is recommended to replace the oil filter at the same time as the oil is replaced, which can more effectively protect the engine and avoid losing more than a small amount due to ignoring the replacement of the filter.