

Subject : To prevent the engine from stopping or being unable to start.

※ Degradation and water contamination in the fuel

Applicable model : Pump model using carburetor

<Summary>

Clogging of fuel passage in the carburetor

Some of the components of gasoline will be evaporated as time goes by. On the other hand, components which do not evaporate will remain in the carburetor and fuel tank. This means that the gasoline component concentration will be changed. It becomes so-called degradation gasoline. Gasoline must be replaced periodically to avoid start-up failure.

An example of problems caused by gasoline degradation is clogging in the inside of the carburetor. The engine has a carburetor for supplying fuel to the combustion chamber. The fuel is pooled temporarily in the carburetor. Here in the carburetor, fuel is sucked at the nozzle and supplied to the engine through the intake manifold. If gasoline remains in the carburetor which is constantly exposed to the atmosphere, then the density will be increased by the vaporized component of gasoline. Gasoline becomes gel-like, especially if it remains for a long period of time. High density fuel may clog the narrow nozzle inside the carburetor. If an engine cannot be started after long-term storage, this could be caused by the clogging there.

To prevent this problem, drain the fuel in the carburetor when you finish using the pump. The carburetor must be emptied.

Degradation and water contamination in the fuel.

With regard to water contamination in the fuel tank, one of the factors is condensation. In relatively higher temperatures: the vaporized component contained in the gasoline evaporates, and it will exit the tank through the tank cap hole for adjusting the pressure of the internal tank to the atmospheric pressure. At night, the outside air temperature decreases and outside air comes into the tank. Then the moisture in the air also enters the fuel tank. This moisture will be condensation on the inside of the tank wall. Water with heavier specific gravity than gasoline goes along the inner wall of the tank to the bottom of the fuel tank and accumulates at the bottom.

If the water flows into the carburetor, the engine will stop or be unable to start. In particular, a large space in the gasoline tank, for example a nearly empty gas tank, causes a lot of water dew in the fuel tank.

So when you store the pump, the gasoline in the fuel tank should be almost fully filled to reduce the empty space in the tank. In addition, when you fill gasoline from a carrying can into the fuel tank of the pump, Check that no water is in the carrying can itself.

