

# SpiritPFC Fuel Purifier

## Drop-in Installation

Before you install the SpiritPFC Fuel Purifier into a typical fuel tank or storage can, it helps to understand how it works.

When used in the “drop-in” form the SpiritPFC Fuel Purifier stabilizes the fuel and kills / inhibits bacterial growth in your tank as well as treating the fuel resulting in better performance. Most important, the purifier must be immersed in the fuel to work!

It makes no difference what attitude the purifier is in the tank as long as it is in the fuel. The longer the fuel is exposed to the purifier, the better the effect. The drop-in is made of a combination of metal alloys and is very durable; however, it is important to follow a few guidelines when installing the product.

**Important-** Before installing the SpiritPFC Fuel Purifier, an inspection of the fuel system should be made especially verifying that the fuel tank does not contain standing water.

This may sound strange, but in many diesel fuel systems such as in large diesel trucks, as well as gasoline systems, there can be pooled water at the bottom of the fuel tank. This is a result of condensation, but also because water is normally present to some extent in all fuels.

Because fuel outlets are usually slightly above the lowest point of the tank and water being heavier than the fuel, this water can collect at the bottom of the fuel tank.

You can see now that if you dropped the fuel purifier into a fuel system that contained this pooled water, it would settle to the bottom and essentially be immersed in water rather than fuel. In this case, the purifier would not be able to interact correctly with the fuel. If left soaking in this water long enough, the purifier would eventually corrode as any metal and be rendered useless.

For this reason, we recommend that **whenever possible and practical** the purifier should be suspended from a lightweight chain or cable connected to the filler cap, slightly above the bottom of the fuel tank (**See Fig. 1**). How much above the bottom is mostly a common sense issue. In a system which for instance has a 100-gallon tank, we recommend a minimum of 2 inches above the bottom of the tank. For a 2-gallon tank installation, probably more like one-half inch.

Do not use any Copper material as a suspension device. Copper being a fairly unstable alloy will interact with the fuel and contaminate your fuel system!

**Keep in mind that you are trying to accomplish is to keep the purifier in contact with the fuel as long as possible, even as the fuel level decreases, but still holding it off the bottom of the tank and out of the potential water. This will also provide a means of easy removal of the purifier when needed.**

**Small Gasoline Fuel Tank Installations** – In most small gasoline systems because pooled water is not normally a problem, the drop-in can simply be dropped into the fuel tank. It can then easily be removed and replaced after several years of use by a telescoping magnet or “grab tool” found at many auto parts stores.

**Diesel Fuel / Large Fuel Tank Installations** – In many large fuel tanks such as large diesel trucks, there is a chain, which is secured to the filler cap so the purifier chain or cable can simply be attached there.

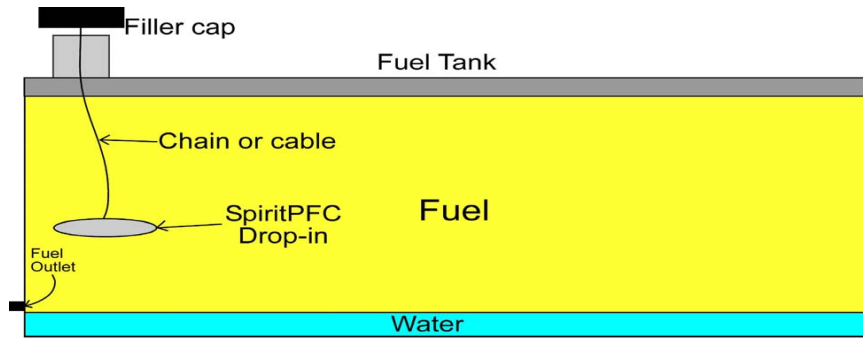
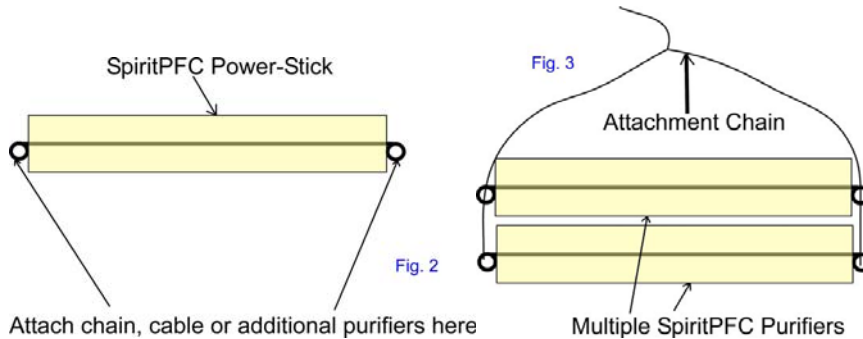


Fig. 1

To attach the suspension chain to the purifier you can use the following (or similar) methods. (See Figs. 2 & 3)



The suspension chain can be attached to the end loops of the purifier, or if the purifier is used in a larger fuel tank than one purifier is rated for, you can attach multiple purifiers. (See Fig. 3)

**Warning** - Do not install purifier in any applications in which you will not be able to remove it easily! It is the responsibility of the customer and user to verify that the installation of the purifier does not interfere with any of the devices within the fuel tank and can be removed easily.