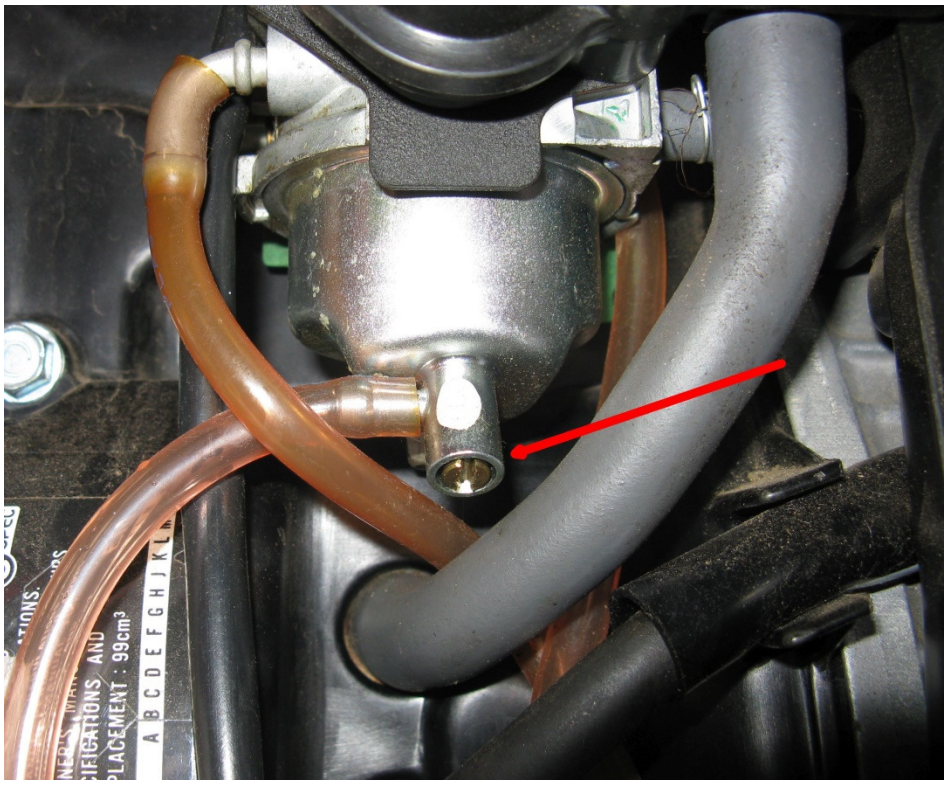
Honda EU2000i Ignition Cutoff Switch Installation

I have owned a EU23000i for nearly twenty years and it has given excellent service. Three years ago I had a problem - the generator started easily as usual, but would not run with the choke off. I ran it for nearly an hour in the half choke position and eventually it ran normally. A year later I had the same problem so I searched the web for information. This problem is common and is caused by storing the generator with ethanol gasoline in the carburetor. It gums up the carburetor and makes your generator run rough or not at all. I ended up draining the fuel tank and putting clean fuel into it with a dose of SeaFoam. I ran it for about thirty seconds to get the SeaFoam into the carburetor and then let it sit for an hour. I did this four of five times and it started running normally. SeaFoam is wonderful stuff and I now carry a can of it in my toolbox.

While I was working on it I noticed that the carburetor bowl can easily be drained with a screwdriver. Here is a photo of the drain valve.



When the valve is opened with a screwdriver the fuel drains out the hose on the left through the underside of the case.

The shutoff switch on the EU-2000i cuts the ignition and also shuts off the gas. Since both functions are controlled by one switch there is no way to run the carburetor dry. A friend referred me to a webpage for converting the EU-2000i to propane and their kit includes an ignition cutoff switch that allows you to shut off the fuel with the main valve and run the carb dry.

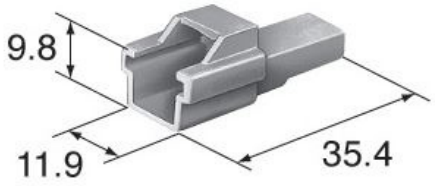
I also found several webpages explaining how to make this installation. Here are two samples.

https://www.survivalistboards.com/showthread.php?t=309097

http://rvbprecision.com/rv-projects/honda-eu2000i-generator-fuel-shut-off-the-easy-way.html

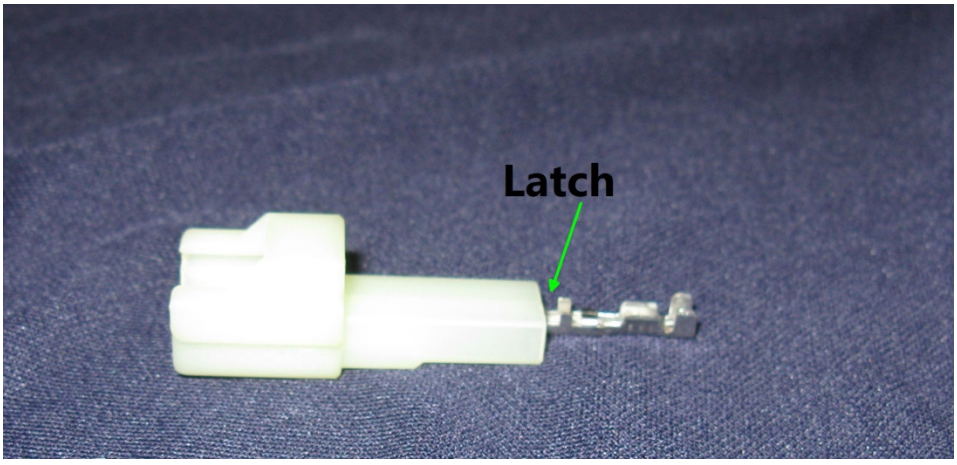
The information on these pages is good, but I did not like either method of attaching the kill switch to the existing connector. The 3M crimp connectors can cut the conductor wires if not properly installed, and the use of modified fork terminals looked susceptible to vibration.

More research identified the Sumitomo 6090-1031 connector as the ignition cutoff connector. They are not commonly available in the U.S. but are available on the internet – do a web search for that part number. I bought five sets of connectors through Amazon for less than ten dollars. They came out of Southeast Asia and I received them about a month after I placed the order.



https://www.amazon.com/gp/product/B079FR79KJ/ref=ppx_yo_dt_b_asin_title_o08_s00?ie=UTF8&psc=1

If this link is no longer good, search for '6090-1031' connector and you will find lots of listings, but most of them are for bulk purchases or have high shipping costs.



To install the cable:

1. Crimp and solder the contact pins to about a foot of two conductor wire and install them in the holder. Note that there is a notch in the contact that corresponds to a little latch in the holder.
2. Remove the generator side panel and disconnect the ignition kill connector. It is the one with two wires.
3. Verify that your replacement connector fits the other connector.
4. Drill a hole in the case for the switch. I elected to install mine in the side of the case near the main cutoff switch. This required that I remove four screws from the end plate and slide the plate away from the generator. It is tethered with cables, so you will be working in a tight area.
5. Connect the two connector wire to the ignition kill connector. Route the wire to the switch location taking care to keep it away from the starting cord.
6. Connect the switch to other end of the two conductor wire and mount the switch. I used a push button 'normally off' switch that has an O ring gasket to prevent water entry, but you can use most any type switch.

That is all there is to it. You can now shut the generator off by closing the new switch. If you turn the main switch off the engine will run until the carburetor runs dry. I do this if I am going to store it for more than a couple of weeks. I also drain the last bit of gas out of the carburetor bowl.