

Rev

1

FUEL FROM H₂O

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1v Microprocessor EFFE

1v Microprocessor EFIE instruction guide

This Guide is for MagDrive Fuel From H2o certified installers only.

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EFIE

This software based EFIE is compatible with 1v sensors only. Before you begin your installation first you need to identify where the sensor is located and which is the sensor's signal wire.

The EFIE needs to be installed on each primary o2 sensor, the ones located before the catalytic converter and you'll need a DC Volt meter to ID signal wire, for faster installation service use tool ST05 to identify sensor type and signal wire. The signal wire will have an oscillating voltage from 0.1v – 0.9v (100mv – 900mv).

The EFIE has 6 wires, RED, BROWN, GREEN, ORANGE, BLUE and YELLOW. The Yellow wire has no function and is just an extra wire, you can cut it off so it won't confuse you. Wire color code:

RED: 12v +
 BROWN: 12V - ground
 GREEN: Reference voltage 12v+
 BLUE: O2 wire to O2 Sensor
 ORANGE: O2 wire to ECU

Installing the EFIE

It's recommended that you install the EFIE inside of the vehicle to protect from hot temperatures of the engine and water..



Since the EFIE's wires are not long enough to reach your connections you'll need to install extension wires.

On the O2 Sensor Cut the signal wire and solder 2 extension wire to each lead, make sure you use different color wire for each lead, this will help you id which wire goes back to sensor and ECU. Always use Silver Solder to join the wire connections and for a professional installation use shrink wrap to protect the soldering joints.

Wire Connections

Red Wire: 12v +, Splice to Add-a-circuit wire coming from fuse box, going to Hydrogen System switch. Make sure you splice it before the switch, the EFIE needs to stay running while the engine is running, even if the hydrogen system is turned off.

Brown Wire: Connect to a good ground source.

Green Wire: Connect green wire to anode of the cell, this is a reference wire that tells the EFIE if the hydrogen system is running or not so the processor can change its settings automatically when there is no HHO.

Orange Wire: Connect to O2 sensor wire going ECU

Blue Wire: Connect to O2 sensor wire going back to sensor.

Adjusting the EFIE



Adjusting the EFIE is a very simple process; you don't need any voltmeter or any other tool to adjust. You change the setting by pressing the button and changing the numbers.

Turn the vehicle's key to the on position.

Press and hold the EFIE's button for 3 seconds and release the button, numbers will appear on the display, the numbers go from -30 to +30

-30....- 25....-20....-15....-10....-5....0....5...10...15....20...25...30

To get the desired results you need to go to the positive side of the scale which on the EFIE's display is determined by a dot on the right number display. See picture below. By pressing the menu button continually you'll change the numbers on the scale, every time the LED light flashes it changes the scale and allows you to go positive or negative.

Example, if number is set on +11(Positive is indicated by a dot, like the picture below) and you want to go to 0, start pressing the menu button to change numbers, if numbers are increasing, stop pressing the button wait for the LED light to flash once and start pressing the menu button again and the numbers will start to decrease.



We recommend initial setting at 11. and you may increase the setting by 2 after every driving test, to find which setting is your best.

To save settings press and hold menu button for 3 seconds.

If you have 2 EFIEs installed on the vehicle, make sure the settings are the same on both units.

You may now start the vehicle; wait few minutes for engine and o2 sensors to reach operating temperatures and look at the EFIE's display, the dot on the display should start flashing, following o2 signal cycle.



Note

For technical support you may access our support forum

www.fuelfromh2o.com/forum

or call us at 1-770-783-1678

You may post your results and installation techniques at our support forum; this will help our distributor in the network with future installations.