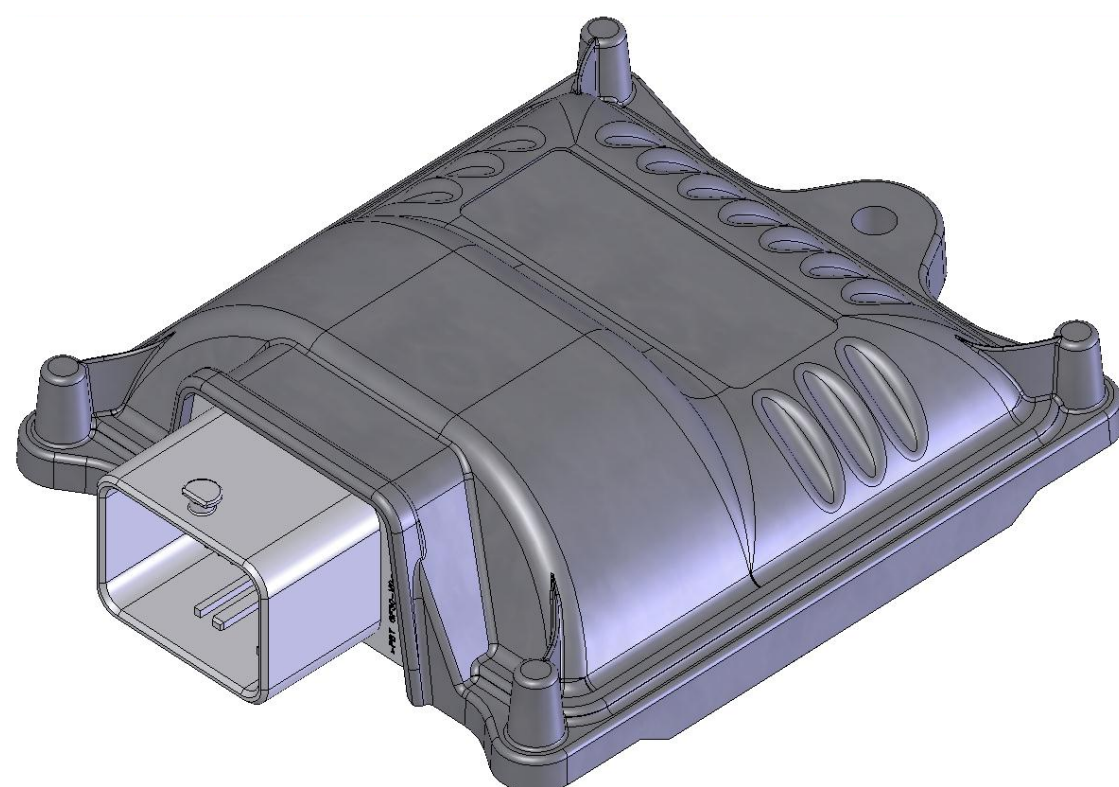


MP32

4 CYL. INJECTION CONTROL UNIT INSTALLATION MANUAL



Where to install the control unit:



- **FAR** from any **WATER LEAKAGE**



- **FAR** from **EXCESSIVE HEAT SOURCES** (such as exhaust manifolds).



- **FAR** from **HIGH-VOLTAGE CABLES**.



Create efficient electrical connections without using any "POWER TAPS".
Properly insulated soldering is the most effective type of electrical connection.



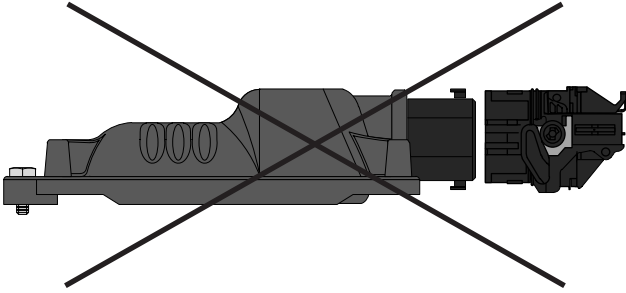
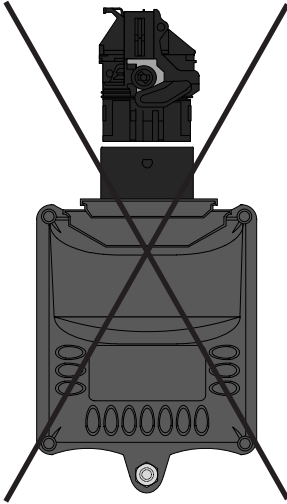
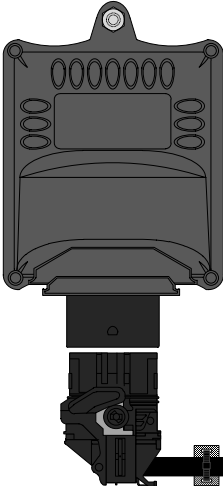
Advise the customer that if the GAS system fuse burns, the connections of the devices to which it is connected will be restored. It is strongly recommended not to replace the fuse with another one with a higher amperage rating since it may cause irreparable damage.

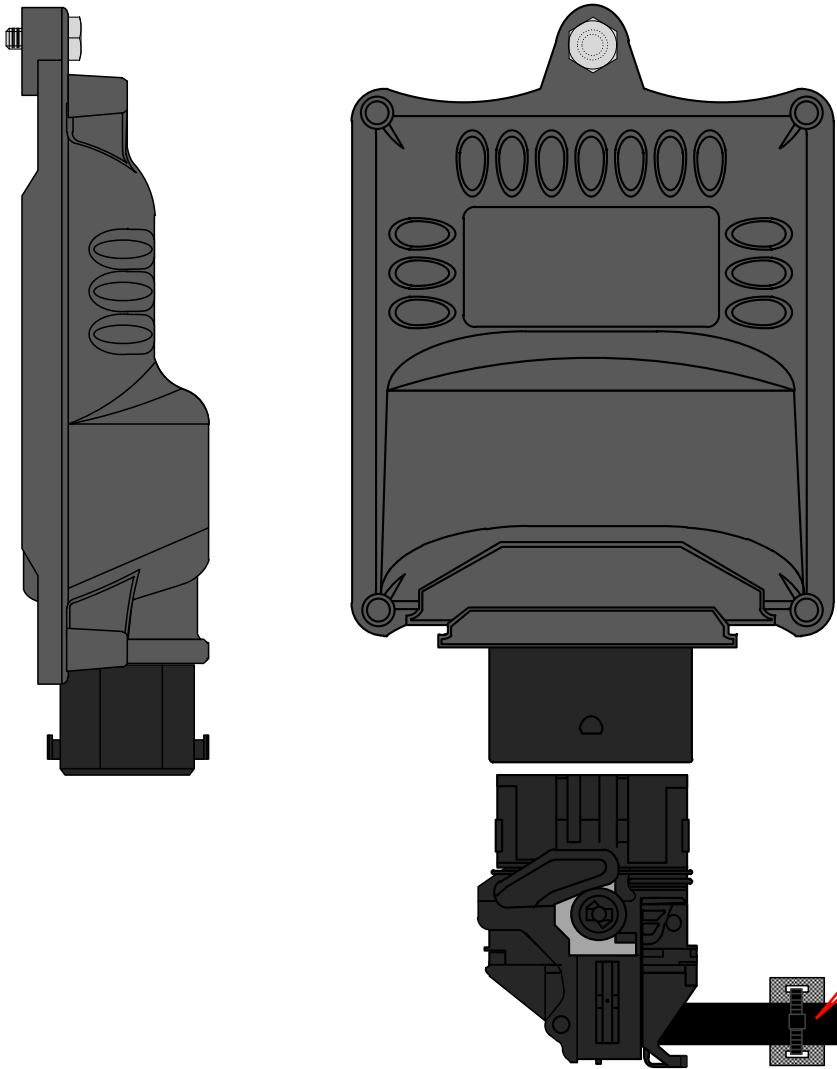


Do not open the Control Unit box for any reason, especially when the engine is running or the key is in the ignition, to avoid irreparable damage.
ENERGY REFORM will not be held responsible for damage to property or injuries to persons if unauthorised personnel tamper with its devices; such tampering will also invalidate the WARRANTY.

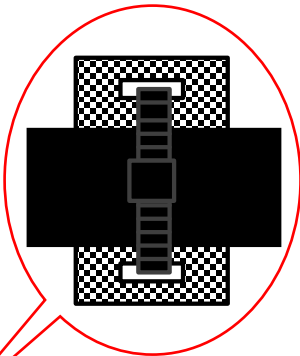
Technical specifications	
Supply voltage	Vbatt=10÷16V
Operating temperature	-40÷105°C
Protection fuse	MAX 15A
Current absorption with the actuators disabled	Imax ≤0.5A
Current absorption in standby mode	Istandby ≤10 µA
Actuators managed	up to 4 injectors with the following characteristics: Imax=6A, Vbat max=16V
Wire output gas solenoid valves	Pmax=50W, Imax=4A (power and maximum current with just one output enabled)

HOW TO INSTALL THE CONTROL UNIT

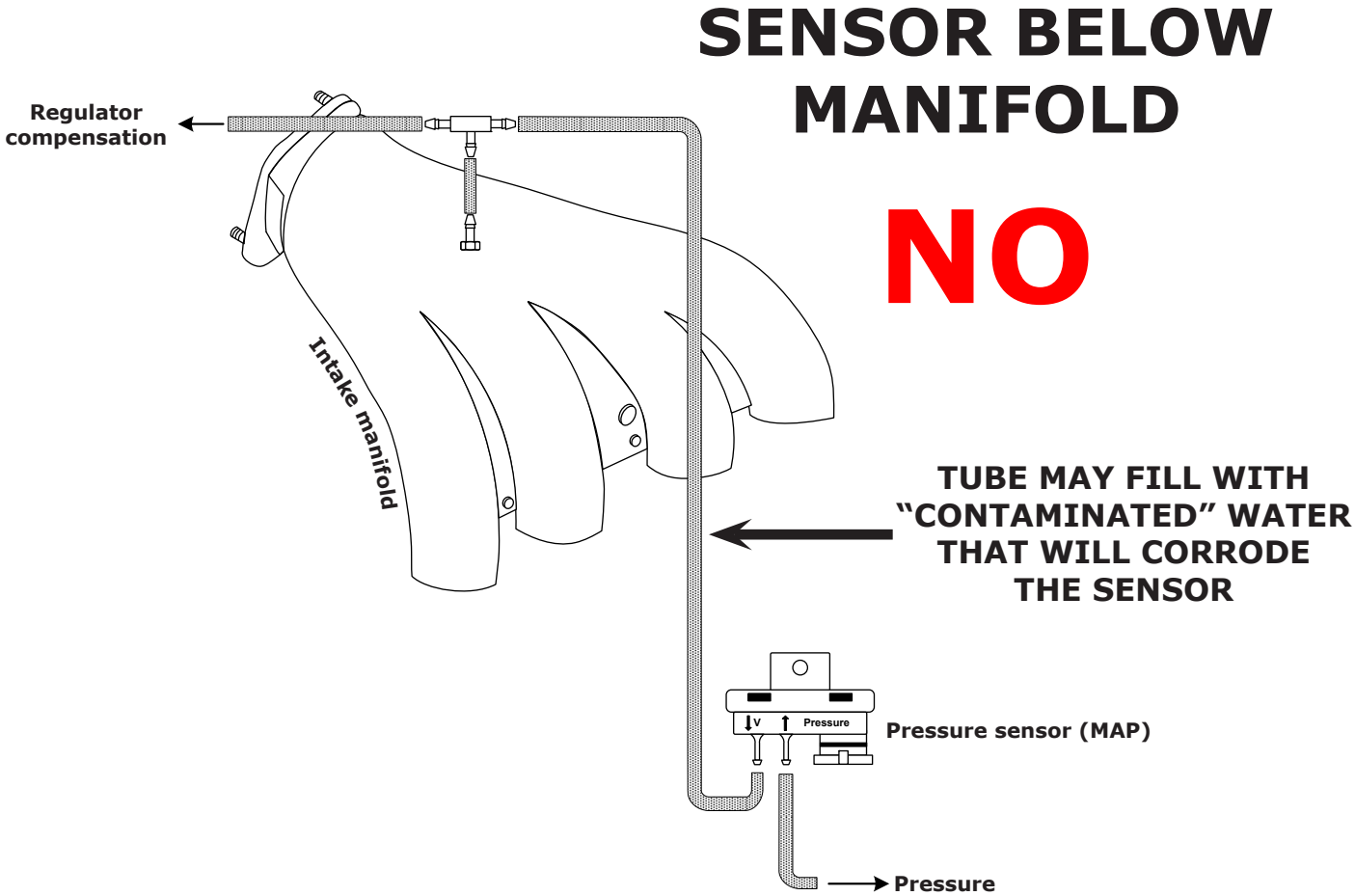
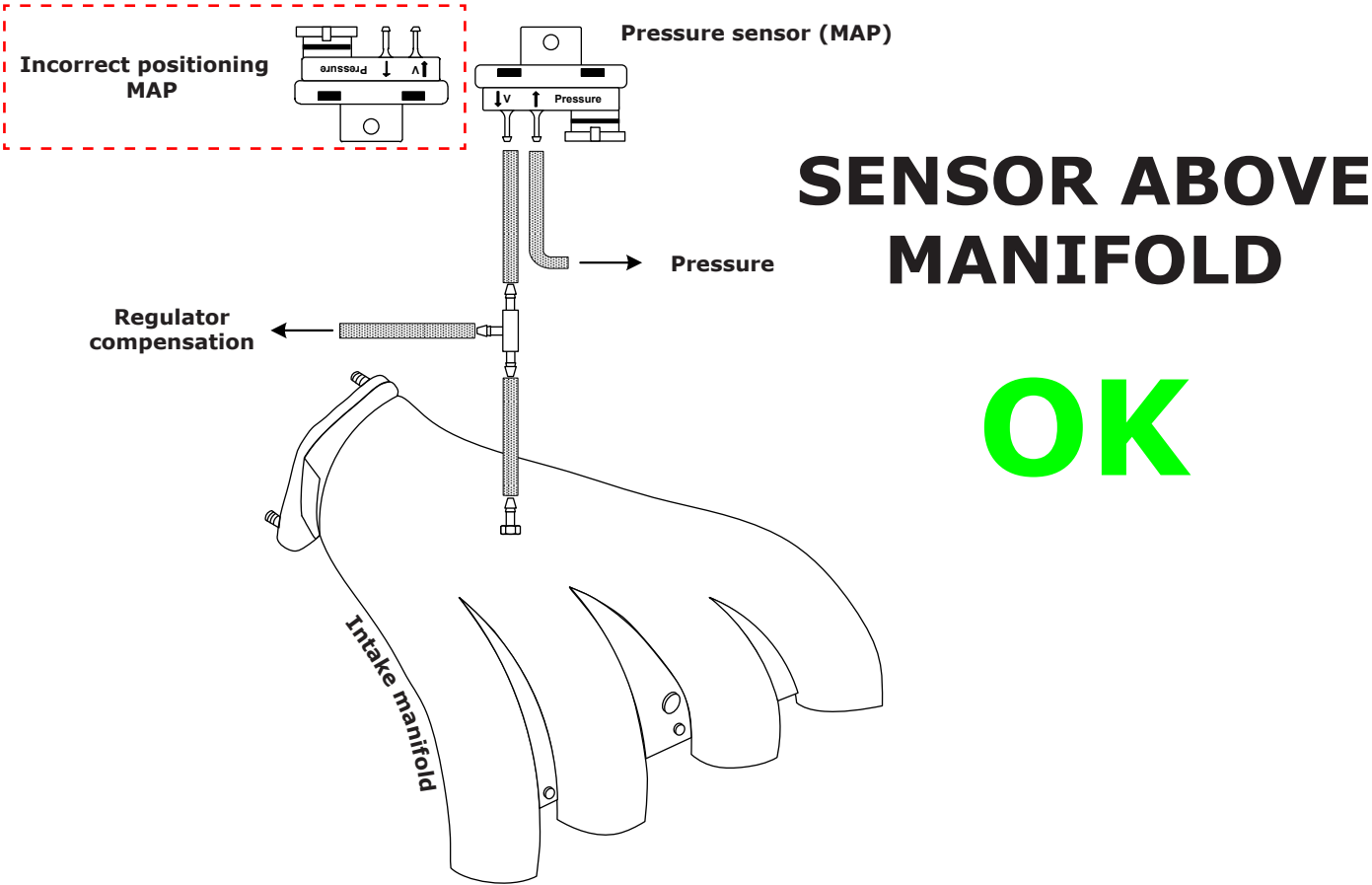
INCORRECT INSTALLATION	INCORRECT INSTALLATION	CORRECT INSTALLATION
		

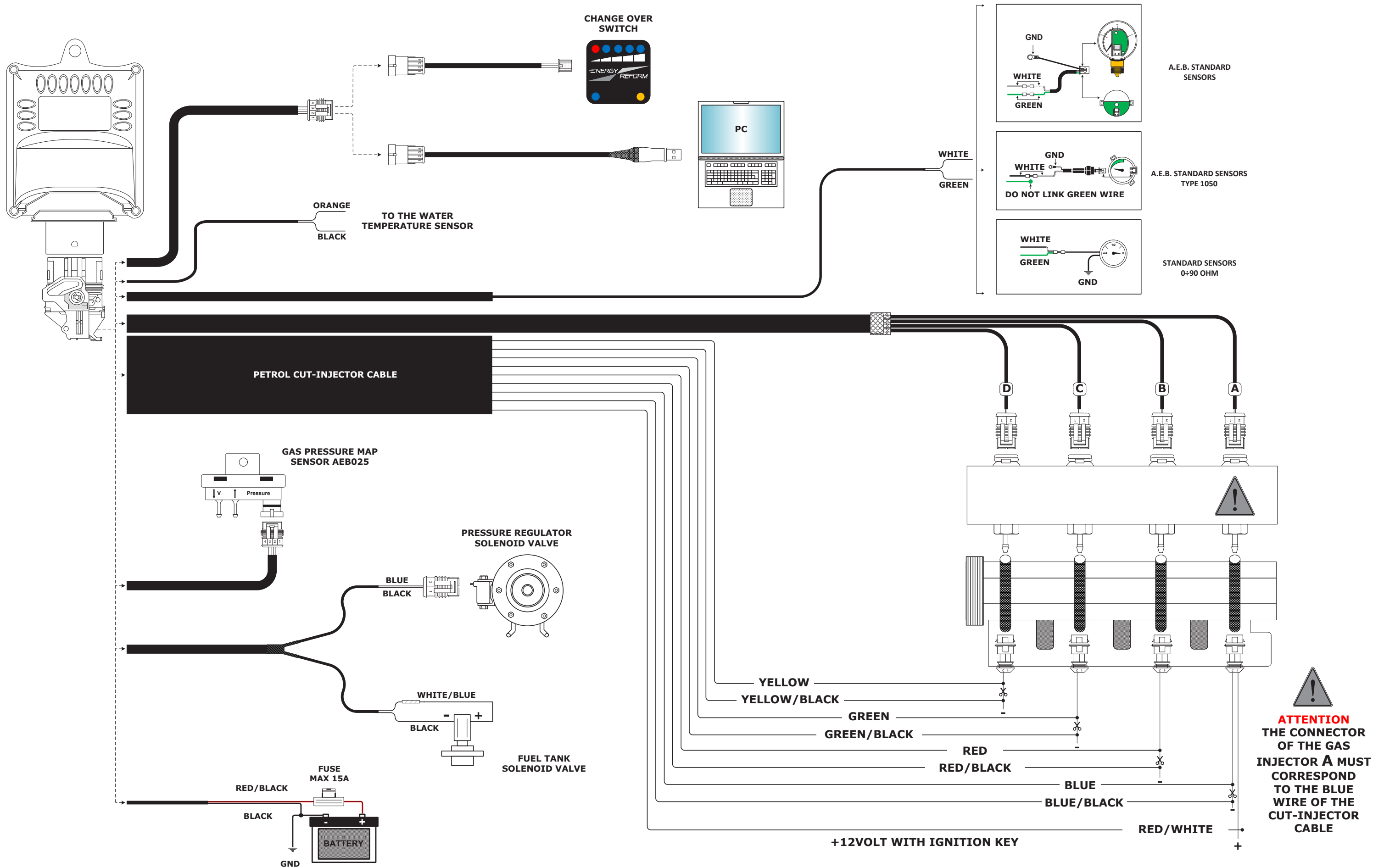


⚠ WARNING ⚠
Fix the wiring control unit appropriately (for example with clamp) to a support in the engine compartment to reduce vibration trasmitted to the ECU



ASSEMBLY MAP DIAGRAM

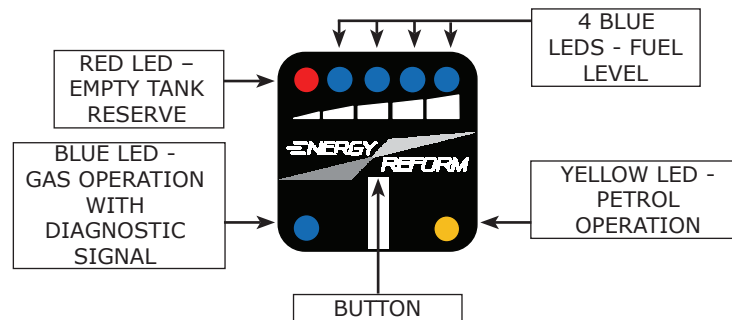




CHANGEOVER SWITCH OPERATION

Operating description

The changeover switch supplied with the kit has one button, 7 LEDs and an internal buzzer.



BUTTON

This is used to select either the petrol or the gas fuel supply. Press the button one time to switch to gas and press it again to return to petrol.

BLUE LED FUNCTIONS

Rapid flashing – the control unit is prepared to start with petrol and switch automatically to GAS.

Steady on with yellow LED off – Gas operation.

RED LED + 4 BLUE LED FUNCTIONS

Fuel level indicator; reserve RED LED, while the 4 BLUE LEDS indicate the fuel level (1/4, 2/4, 3/4, 4/4). The indicator is illuminated only when the gas mode is selected.

YELLOW LED FUNCTIONS

Steady on with Blue LED off – PETROL operation.

Steady on with flashing Blue LED – the control unit is prepared to start with petrol and switch automatically to Gas.

LOW GAS PRESSURE PETROL CHANGEOVER

When the changeover switch indicates the fuel tank is in **reserve** and the gas pressure drops below a set value, the control unit automatically switches over to gas. This prevents the engine from running with an excessively lean carburetion, thus damaging the catalyser. Before returning to gas operation, fill up. The changeover switch signals the **changeover to petrol due to low gas pressure** by activating the internal buzzer, illuminating the YELLOW petrol operation LED and by illuminating the RED LED in an alternating pattern with the 4 BLUE LEDS. To make the changeover switch return to normal operation press the BUTTON one time; the YELLOW LED will remain on to indicate that the car is operating with petrol and the buzzer turns off.

EMERGENCY

If the car won't start with petrol (e.g. problems with the petrol pump, etc.), it can be started directly with GAS. To do this follow the instructions listed below:

- insert the ignition key and press the button to switch the changeover switch to gas operation;
- remove the key;
- insert the ignition key and keep pressing the button (about 5 seconds) until the BLUE LED stops flashing;
- now, start the engine without turning off the ignition key; the car will start directly with GAS;
- each time the car engine is turned off, the operation will have to be repeated to start in the EMERGENCY condition.

WARNING!

The EMERGENCY function can be activated only if the changeover switch is illuminated when the ignition key is turned