

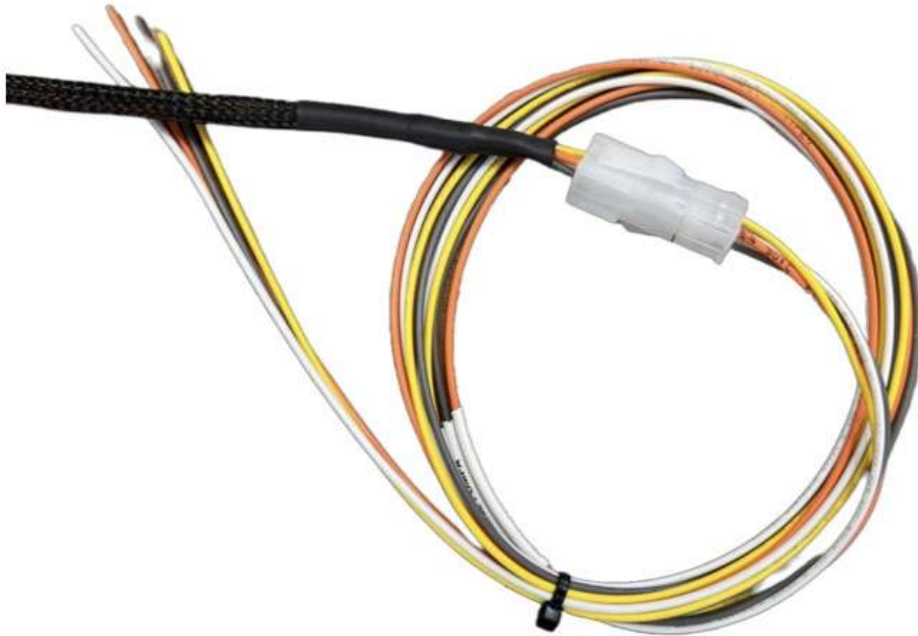
## **Installation Instructions – BMW M57/M47 Stand Alone Harness**

The wiring loom supplied has 4 connectors:

- 1- Ecu connector
- 2- Pedal connector
- 3- OBD diagnostic port
- 4- Ground
- 5- Positive (to 87 relè output)
- 6- Optional wires body loom connector



## Accessories wires

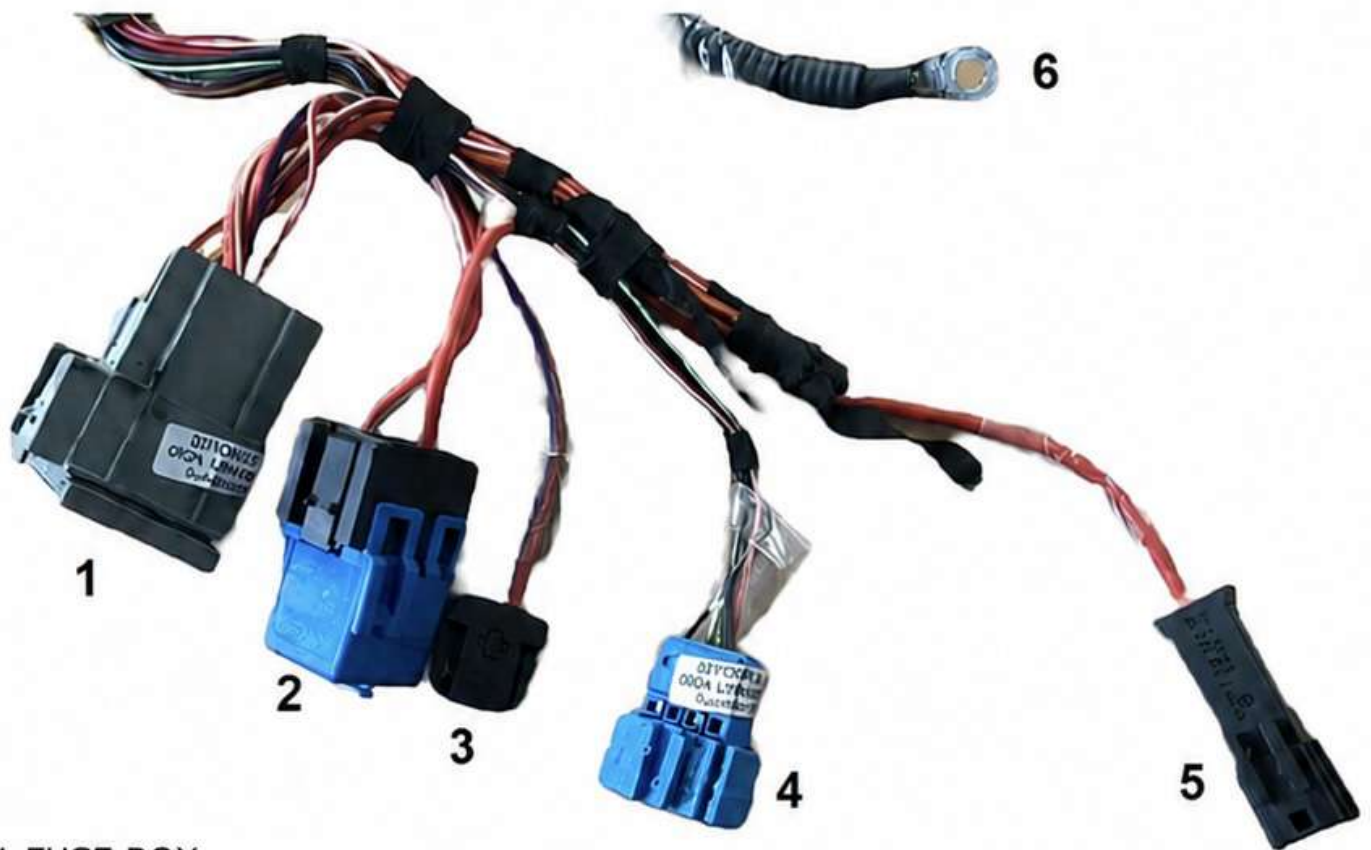


**White:** negative bulb lamp oil

**Grey:** negative relay fuel pump

**Orange:** pwm signal FAN radiator (only bmw original fan 3 wires)

**Yellow:** rpm signal tachometer



1 FUSE BOX

2 MAIN RELAY

3 12V OUTPUT (87RELAY) CONNECT TO **RAFF4X4PARTS** RED WIRE

4 X6011 CONNECTOR

5 12V BATTERY (FUSE 40A)

6 GROUND (IF PRESENT)

## Power supply:

- **Black wire** negative ground battery
- **Red wire** to positive OUT relay 87: not connect direct to positive battery!!! This wire need connect only after relay is closed (connector A6011 red/blue wires or point 3 photo
- **White/blue** wire ignition key +12v; this wire activated relay and ecu + sensor.

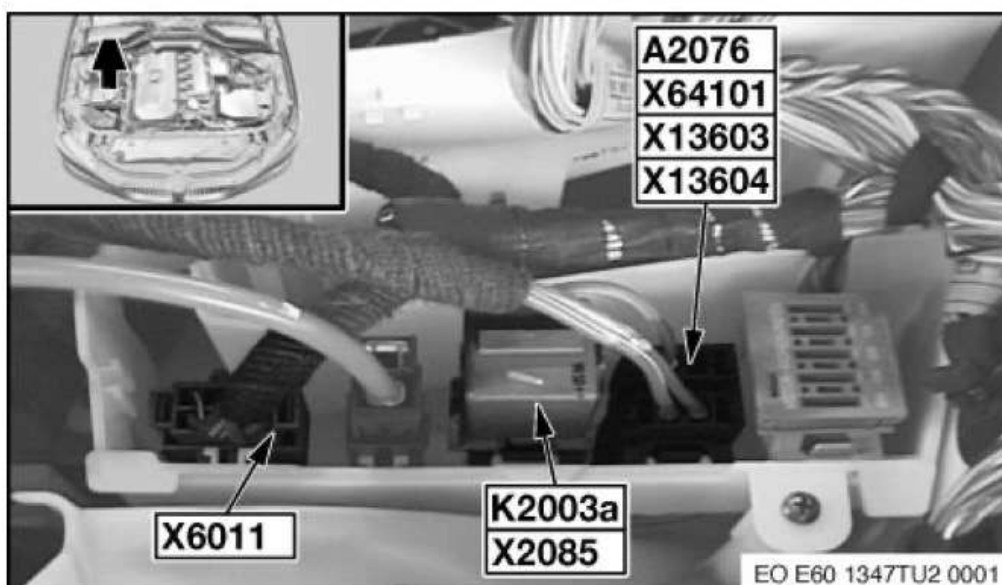


### IMPORTANT

The ecu power relay is activated and deactivated by the ecu, the relay switching off lasts about 8 seconds, never interrupt the power supply during this period of time and never start with a flat battery: the emulator inside the ecu could lose the immobilizer code

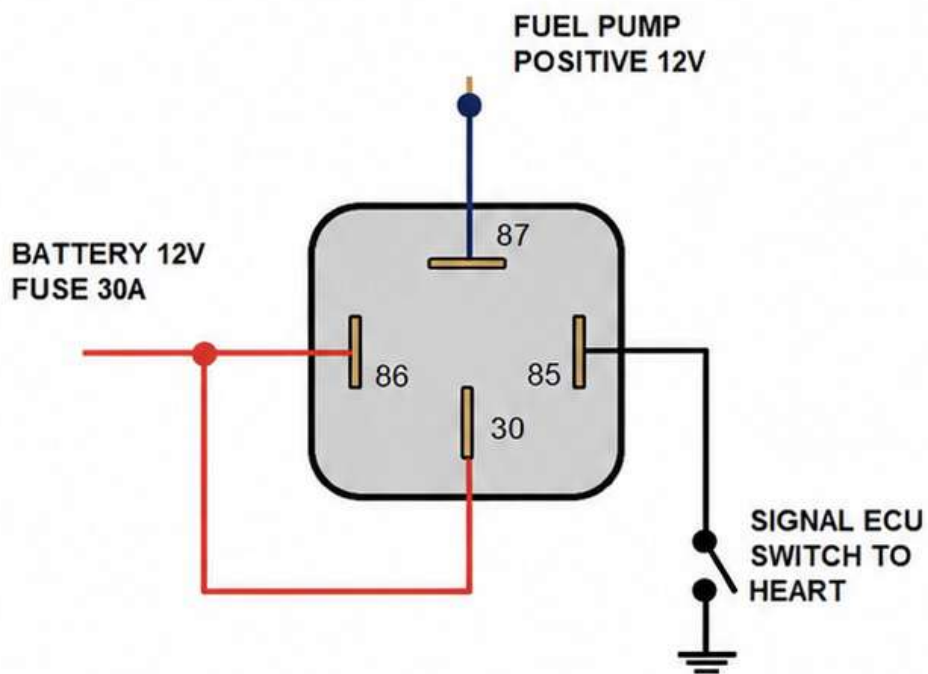
## A6011 Engine plug

1. (Black) Starter motor signal
2. (Red/Blue) Main relay supply to ECU
3. (Red/Blue) Main relay supply to ECU
4. (Red/Blue) Main relay supply to ECU
7. (Green) Main relay supply to MAF



Attention: the x6011 connector may be different according to the car model, the pinout may change but the color of the wires remains the same: red/blue 87 relay output, starter motor ignition black, MAF power supply green (usually unused as eliminated via software)

## Example of fuel pump relay connection



Signal ecu: wire grey **Raff4x4parts** wiring

WARNING: READ CAREFULLY



IF YOUR ENGINE IS EQUIPPED WITH A TURBO WITH ELECTRONIC ACTUATOR  
**YOU MUST PUT PIN 2 TO THE BATTERY NEGATIVE!**

PIN 1 POSITIVE (KEY ALREADY WIRED)

PIN 2 NEGATIVE (THE NEGATIVE WIRE MUST BE RECONNECTED)

PIN 4 ECU PWM SIGNAL PIN 93

IF YOU HAVE MODIFIED THE TURBINE FROM AN ELECTRONIC ACTUATOR TO A  
VACUUM ACTUATOR WITH SOLENOID VALVE, JUST CONNECT PINS 1 and 4  
FROM THE 5 PIN TURBO ACTUATOR CONNECTOR INTO THE SOLENOID VALVE.  
THIS MOD REQUIRE MOD ON THE SOFTWARE.