Pro

System Check

1: Install unit in accordance with included guide

Be careful not to plug the unit into any location that is not clearly marked in the instructions. If in doubt please contact our Support team. You risk damaging the tuning module by plugging it into the wrong location.

2: Check connector orientation

If your vehicle has Bosch connectors as pictured below, they can be pushed into the tuning box connector incorrectly if not done with care. Please double check that you have plugged the connectors in the correct orientation as shown below (shark fin engages with clip, not the cut-out on the underside) or the car will not start:

3: Locking clips

When the vehicle has a coloured locking tab on its clip, you must first pull this clip backwards, and then press down the button and remove the original connector. To install the tuning box connector, make sure the yellow tab is still pulled fully back, depress the button and push the connectors fully together. You can now click the yellow tab forwards. To check this has been done correctly, **try pulling the connectors apart, if installed properly they will be locked together**.

4: Status lights

When the device has been fitted, turn the ignition key to the ON position, but do not start the engine. There should be a Blue light on the back of the unit which is now flashing. Once the engine is started the Blue light will turn steady. The Green and Red lights will flash in accordance with rpm when the engine is revved.

If this is not the case then the device may have been fitted incorrectly. Please contact Bluespark support if this cannot be resolved.

Fuel economy improvements

The tuning box improves the amount of torque that the engine produces over the entire rev range. One of the major fuel economy benefits comes from the ability of the driver to drive in a higher gear than previously, thus reducing losses. For example, the tuning box may allow the car to pull up a hill in 5th gear, where it used to require 3rd or 4th.
If you are looking to mainly improve economy, bearing this in mind and adjusting your driving style accordingly can improve your MPG further.

Troubleshooting

The tuning box will not cause any engine problems or errors to be present if fitted and set up correctly. If you have problems please follow this guide.

If your car displays an engine management fault, do not panic!! These situations are usually very easily resolved. Most engine management lights will usually turn off as soon as the fault has been rectified and the ignition is switched back on. On rare occasions the car may take 3 warmup cycles to clear the light (this means taking the vehicle up to operating temperature and leaving it to cool down completely, 3 times).

Problems:

- ***The vehicle will not start***
  - Connection issue
- ***Engine management light came on immediately and vehicle is in restricted performance mode***
  - Connection issue
- ***Engine management light came on immediately but vehicle drives perfectly***
  - This is usually due to the car detecting the plugs being disconnected. This could be due to the box being fitted too soon after removing the keys from the ignition, or simply just that some vehicles turn on the ECU at random times. You do not need to do anything if the car drives fine and the box lights up correctly. The fault will correct itself in 3 warmup cycles.
- ***Engine management light came on whilst driving, or vehicle lost almost all power***
  - Tuning box setting is too high
- ***Vehicle emits black smoke when accelerating hard***
  - Tuning box setting is too high

Resolutions:

- ***Connection issue***
  - Check connector location against instructions
  - Check connector orientation and try pulling connectors apart to see if they are properly engaged
  - If problem persists contact our support team and if possible take a picture of the installation location & connectors and email them to support@bluesparkautomotive.com
- ***Tuning box setting is too high***
  - Move the fine tune adjuster down until the problem is resolved, if after moving several notches you cannot solve the problem then move the red jumper one position to the left to reduce the tune level. Repeat this if the problem still exsits.

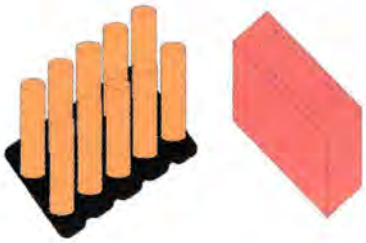
User adjustment

The tuning box comes pre-configured from the factory for the best compromise between power and fuel efficiency. Although we recommend lower settings for economy, in some instances increasing power output can have a positive effect on fuel efficiency due to the increased torque at low revs, however accelerating harder than usual with the extra power will negate these gains.

We recommend that the device is left at its default setting (usually setting B or C depending on vehicle), if you are changing this please make a note of your original setting. User adjustment is only intended if the device does not perform as you wish. The adjustment function is located behind the back panel of the unit. Remove the 4 screws using a 2mm hex/allen key as shown below.

Remove screws using a **2mm** allen/hex key

To increase performance move the red jumper to an alternative pin set to the right. To decrease performance (reduce any **visible smoke**, or if the current state of tune has **caused an engine management light** to appear when driving) move the jumper to an alternative pin set to the left until the problem is resolved. Starting problems are down to a connection issue as the box setting does not affect engine idle.



The red jumper can be moved across the pins to select alternative maps.

The 0-9 dial can be adjusted to fine tune each map.
5 is the default setting
0 disables the tuning box

When adjusting the unit you should adjust it one setting at a time. For example, move from setting 5 to setting 6 then test the car and see how it drives, if you need more performance move on to the next map (eg B to C). It is not sensible to move to a high power map (E) without testing the intermediate maps or fine adjustments first (1-9).

Users of cars with an exhaust particulate filter (DPF or FAP) should be aware that the filter may regenerate more frequently than normal if the car is used for a lot of short, start and stop journeys or town driving. If this is the case it is recommended that the adjuster is left at its default setting or lower. When the DPF regenerates (cleans) it will cause a