



## Throttle Body Balancing

All multiple throttle body setups need balancing. If throttles are out of balance, you face multiple issues including poor running, engine not idling and backfire. This is a guide to help get your throttle balanced and setup.

Times when you need to check the balance on throttle bodies:

- After fitting. All throttles will be balanced by manufacturers however this is likely to change during installation. Always check then after fitting.
- If throttles have been removed/taken off the car and re-fitted to same or different engine.
- If adjustment has been made to linkage mechanism.
- If a vacuum system has been plumbed in/changed.
- If the car is running poorly.

Firstly, you need to ensure the engine starts and runs, even if this means using throttle to maintain a steady running state. The engine must be able to run at a constant state whilst the balancing of the throttles is done. The engine also needs to be warmed to its running temperature. You will need to use a Synchronometer for balancing, if you don't have one, they can be purchased here: <https://www.specialist-components.co.uk/index.php/shop/engine-management/engine-management-accessories/synchronometer-for-throttle-body-and-carburettor-applications.html>

Using the synchronometer, take the readings of all throttle bodies as below:



All readings need to be the same. If your throttles are out of balance, you should adjust the throttles with the higher readings. Adjustment can be made via the small bleed screws on

the throttles. Turning the screw in will reduce the air flow. Depending on the type of throttle will depend on the amount of adjustment each throttle has.

Once throttles are all equal, you can then adjust your idle speed and TPS calibration using our other handy help guides.

Please ensure you have tried this and the other guides before contacting us as these are the first things we will get you to check.

+44(0) 1953 859785

info@specialist-components.co.uk

[www.specialist-components.co.uk](http://www.specialist-components.co.uk)

Specialist Components  
Unit 5, Northfield Mill  
Poynt Close  
Wymondham  
Norfolk  
NR18 0UB

