

Startup Procedure

The *Startup procedure* is a very important procedure, as to prevent damages to the TCU and Transmission. If at any time the clutches slip, back- off on the throttle immediately! Increase the line pressure and/or check if the fluid levels are correct. *Do not* continue if problem persists as the clutches are very delicate and can damage in seconds.

Transmission and system preparation:

Before you connect the TCU do the following:

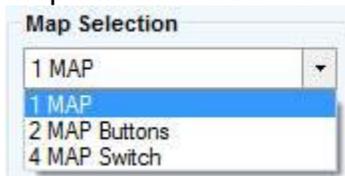
1. If it is a conversion, service the Transmission filter and oil. Make sure if the Transmission uses the correct ATF or synthetic oils. Check the oil level when the engine is running in drive.
2. First, ensure that the installation is correct according to the *Hardware Installation procedure*.

Connecting the TCU for the first time:

You may now proceed with the following steps.

* *If any steps do not correlate with the TCU operation, stop and look for the faults. Ensure that the TCU is earthed correctly!!!*

1. Remove the solenoid fuses.
2. Connect only the 12 way connector leaving the 10 way connector open. Switch the Ignition on. Do not start the Engine. The yellow LED on the TCU must come on, if the yellow LED does not come on switch off immediately as there may be a short on the 5 Volt output that will damage the TCU!
3. Now switch the Ignition off and connect the Laptop to the TCU. Switch it on again. Start the PC software and connect to the TCU. The Transmission data *i.e.* the TPS and gear position should be displayed.
4. Start with *MAP 1* in automatic. If, however it shows *MAP 2* or more, click on *1 MAP* or turn the map switch to *MAP 1*.



5. Go through the setup page and ensure all the settings are correct for your specific Transmission.
6. Calibrate the TPS sensor and save the calibration as described under active sensors. The TPS and speed sensor must be calibrated in *MAP 1*.
7. Calibrate the shifter so that all positions show correctly. Some transmissions such as GM use pressure switches, therefore the engine need to idle.
8. Start the engine and make sure the rev counter is calibrated.
9. Switch the ignition off and connect the 10 way connector. *Replace the fuse and start again.*
10. Put the shifter in drive and the software on the gear profiles. Pull off in first and check that the speedometer works.
11. If the gears are slipping, reduce the line pressure on the graph according to the tuning principles.
12. Calibrate the speedometer by asking a passenger to set the calibration value till it reads the same as the cars speedometer or a GPS. Alternatively do this procedure with the wheels off

the ground and compare to the vehicles speedometer. *Once you are on the road use the GPS for accuracy.*

13. Check if the transmission selects all the gears and gear backs.
14. Do fine tuning according to the tuning principles.
15. Save the data for that profile and start tuning the other profiles and functions.