



# Learning-Technique Throttle Body

## Explanation

This learning technique has to be executed, every time the throttle body is dismantled or a plug is removed.

The following conditions have to be permanently fulfilled to complete learning techniques:

- Battery voltage must not be less than 13V
- Transmission must be in parking position/ neutral gear
- Electronic loads ( headlights, air conditioning system, heating) are switched off
  - On cars with continuous lighting system proceed like this:
    - Apply parking brake
    - Turn the light switch to position 1
- Steering wheel is in neutral position
- Engine and transmission must be at normal running temperature (warm up time is about 10 minutes)

## Learning method for idle-air-volume

First complete the learning method for throttle valve in closed position:

- Turn on ignition while accelerator is released
- Turn off ignition and check the sound of moving throttle valve within the next 10 seconds

Continue with the following steps to finish idle-air-volume learning method:

1. Turn on ignition while accelerator is released and wait for 3 seconds.
2. Completely push down and release the accelerator five times within the next five seconds
3. After a 7 second pause, push down the accelerator for about 20 seconds until the fault indicator switches from flashing to continuous glowing. Flashing starts after 10 seconds. Then release the accelerator immediately.
4. Start the engine and let it run in idle for 20 seconds.

Timing-Diagram:

