Basic setting (function 04)

With ignition on and engine at standstill, the following operations can be performed using "function 04", basic setting:

- Adapt throttle valve control module to Engine Control Module (ECM) ⇒ Display group 060(⇒ Page 24-125)
- Vehicles with automatic transmission:
 Adaptation of kick down function of accelerator pedal position sensor to ECM ⇒ Display group 063 (⇒ Page 24-145)

With engine running, the following operations can be performed using basic setting:

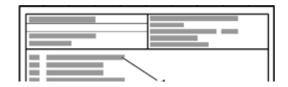
 Adaptation of oxygen sensor control ⇒ Page 24-75

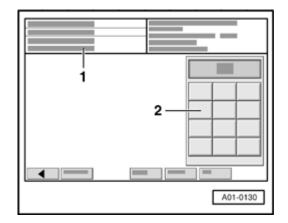
Test requirements for operations with engine running:

- No DTCs in DTC memory.
- Coolant Temperature at least 80 °C.
- Electrical consumers switched off (radiator fan must NOT run during test).
- A/C switched off.
- Vehicles with automatic transmission Selector lever in P or N.

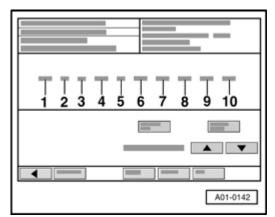
Test sequence

- Connect VAS5051 tester ⇒ Page 01-7 and select vehicle system "01 - Engine electronics". Ignition must remain switched on for this.
- or, depending on desired operation:
- Start engine.
- ✓ Display on VAS5051:
 - In selection -1-, click on the diagnostic function "04 Basic setting".





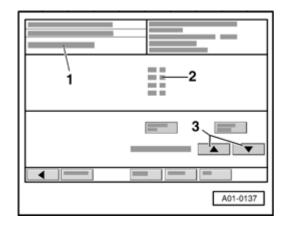
- ✓ Display on VAS5051:
 - 1 Enter display group Max. input value = 255
 - Enter desired 3-digit display group number in button field -2- and press -Q- button to confirm input.



- ✓ Indicated on VAS5051 for display group 000:
 - 1 Display group 0
 - 2 Display field 1 2 3 4 5 6 7 8 9 10

Note:

After selecting display group number, the EVAP valve is closed and A/C compressor switched off.



- ✓ Indicated on VAS5051 for display group 001 to 255:
 - 1 Display group X System in basic setting
 - 2 Display field 1

Display field 2

Display field 3

Display field 4

Notes:

- ◆ For display group number 000, measured values are displayed as a decimal.
- ◆ To switch to a different display group, proceed as follows:

| Display group | VAS5051 tester | | |
|---------------|-----------------|--|--|
| higher | Press ▲ button. | | |
| Lower | Press ▼ button. | | |

- End function "04 - Basic setting" by pressing ◀ button.

| Display group 000 (indicated values decimal) | | | | | | | | | | | | |
|--|--|---|---|---|---|------------|---------------|-----------|-------------------|---|-----------------|---------------|
| Engine running at idle (Coolant Temperature not less than 80 °C) | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | ◀ Display fields | Specified value | represents |
| | | | | | | | | | | Adaptation value of mixture formation, partial throttle | 103 to 153 | -10 to 10% |
| | | | | | | | | | Ada (idle | ptation value of mixture formation, closed throttle | 78 to 178 | -10 to 10% |
| | | | | | | | | Co | ontrol | value of mixture formation | 103 to 153 | -10 to 10% |
| | | | | | | | Ac | lapt | tation | value, torque loss at idle: | 113 to 143 | -3 to 3% |
| | | | | | | То | rqu | e a | t idle | | 106 to 189 | -4.3 to 12.2% |
| | Throttle valve angle Vehicle voltage Engine speed (idle speed) | | | | | | | | 1 to 7 | 0.4 to 2.75% | | |
| | | | | | | | | | 142 to 207 | 10 to 14.5 V | | |
| | | | | | | | | | | | | |
| Front Wheel Drive (FWD) | | | | | | | | 74 to 86 | 740 to 860 RPM | | | |
| All Wheel Drive (AWD) | | | | | | | | | 76 to 88 | 760 to 880 RPM | | |
| Engine load (without consumers) | | | | | | | 17 to 40 | 13 to 30% | | | | |
| Engine Coolant Temperature (requirement for basic setting) | | | | | | 180 to 205 | 80 to 105 ° C | | | | | |