



5-Speed Electronic Manual Transmission (085)

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Special Procedures

Prerequisites:

- Transmission Oil Level correct.
- No Fault Codes stored.
- Supply voltage at least 12V.
- Selector Lever in Tiptronic Mode.

- The following Basic Settings need to be carried out when:
 - Every 30000 km / 19000 mi
 - Engine has been removed/replaced
 - Transmission has been removed/replaced
 - Engine Control Module has been replaced
 - Transmission Control Module has been replaced
 - Clutch has been removed/adjusted/replaced
 - Gear Selector or Actuator has been removed/adjusted/replaced
 - Selector Lever has been removed/adjusted/replaced

- Common issues:
 - The connection to the control module may be interrupted after starting the engine, as long as you do **NOT** switch of the ignition the control module will continue at exactly the same position where the connection got interrupted. Step back into the basic setting as usual.

The following 3 Adaptations need to be carried out in a row!

Clutch Travel Sender Adaptation

[Select]

[02 - Transmission]

[Measuring Blocks - 08]

Block 002

[Go!]

Remove connector from hydraulic unit.

Check field 2, specification is **1.8...2.0 V**.

If the specification is not reached, adjust the Clutch Travel Sender (G162).

Re-attach connector to hydraulic unit.

[Done, Go Back]

[Close Controller, Go Back - 06]

Cycle ignition OFF/ON.

[Select]

[02 - Transmission]

[Fault Codes - 08]

[Clear Codes - 05]

[Done, Go Back]

Gear Actuator Adaptation

[Basic Setting - 04]

Block 014

[Go!]

1st field should change from **WAIT** to **ADJUST**.

Loosen the gear actuator nut and tighten it with zero-potential.

Switch selector lever in **E** or **D** and back to Tiptronic Mode.

1st field should show **WAIT** now, transmission now does some shifts, you can monitor them in field 2 (Range: 0...28).

1st field should change from **WAIT** to **(-)**, pull the selector lever to **Minus** and hold it for 5 seconds.

1st field should show **STOP** now, put the selector lever in position **STOP** and wait 5 seconds.

1st field should show **KickDown** now, floor the accelerator pedal completely (to kick down) and wait 5 seconds.

1st field should show **N** now, put the selector lever in position **N**.

1st field should show **StartMot** now, start the engine and let it idle 15 seconds.

1st field should change from **SEARCHNG** to **IGN.OFF**, put the selector lever in Position **STOP**.

Switch ignition off and wait 15 seconds.

*In case there is an Error during the Basic Setting, the Measuring Value Blocks (MVB) will show **RTFM!** followed by a Number which describes the Reason why it failed.*

- 7 = Potentiometer 2 for Gear Recognition (G240)
 - Check Switches and Wiring/Connectors using Measuring Value Blocks (MVB) and Wiring Diagram.

- 8 = Potentiometer 1 for Gear Recognition (G239)
 - Check Switches and Wiring/Connectors using Measuring Value Blocks (MVB) and Wiring Diagram.
- 9 = Reverse Light Switch (F4)
 - Check Switches and Wiring/Connectors using Measuring Value Blocks (MVB) and Wiring Diagram.
- 10 = Potentiometer Values fluctuating during Measurement
 - Check the corresponding Potentiometers in Measuring Value Blocks (MVB) 015 to 018
 - Check Fault Codes (repair if necessary) and Perform Basic Setting again
- 11 = Potentiometer Values
 - Check the corresponding Potentiometers in Measuring Value Blocks (MVB) 015 to 018
 - Check Fault Codes (repair if necessary) and Perform Basic Setting again
- 12 = Gear Actuator incorrectly adjusted or measured values out of specification.
 - Potentiometer, Valves and Selector Finger at the Ball Heads for correct assembly and seating
 - Perform Basic Setting again after adjusting the Gear Actuator

Creep Point Adaptation

[Select]

[02 - Transmission]

[Measuring Blocks - 08]

Block 025

[Go!]

Start the engine, engage the handbrake and press the foot brake.

Put the selector lever in position **E** or **D**.

You can determine the number of creep points left in field 3. It should start at 5 and count down to 0.

Release the brake pedal for at least 3 seconds, press the brake pedal again and hold it for at least 3 seconds.

Repeat the last step until field 3 shows **0**.

If the specified value in field 3 is not reached, check fault codes and perform basic setting again.

[Done, Go Back]

[Close Controller, Go Back - 06]

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Category: Transmissions

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