



# Technical Bulletin

Subject: **Automatic Transmission Shifting, Erratic, Harsh or Delayed Upshifts**

Group: **01**

Number: **97-01**

Model(s): **All with 4 speed Auto. Trans.**

Date: **Jan. 8, 1997**

## Condition

Transmission shifting is erratic, harsh or holds shifts too long (delayed upshifts) with no DTC's stored in DTC memory.

Condition is normally caused by improper throttle angle setting.

## Service

### Note:

**Basic Settings on a newly installed TCM must be set using Function 04 Display 000 prior to using the following procedure to check throttle angle setting and kickdown switch function.**

If any of these conditions exist, check and set the throttle angle setting as follows:

- Connect VAG 1551 Scan Tool.
- Switch ignition ON (do not start engine).
- Press -1- to select "Rapid data transfer".
- Enter address word "02 Transmission Electronics" and advance until "Select function XX" appears in the display window.
- Press buttons -0- and -8- (to select function 08 "Read measuring value block").
- Press -Q- button to confirm input.

Rapid data transfer	Q
08 Read measuring value block	

◀ Indicated on display:

- Press -Q- button to confirm input.

Reading measuring value block	
Input display group number XXX	

◀ Indicated on display:

- Press buttons -0-, -0- and -1- (to input display group 001).

**(Cont. page 2)**



# Technical Bulletin

Read measuring value block	1 →
P      0.21 V      0%	00000111

– Press -Q- button to confirm input.

◀ Indicated on display:

– Without pressing accelerator pedal, print screen.

**Note:**

***While performing the following steps press the accelerator pedal slowly, do not release the pedal.***

***The following 4 displays show incorrect throttle angle setting readings and should be used as examples only.***

Read measuring value block	1 →
P      1.05 V      25%	00000111

◀ – While observing 1551 display press accelerator pedal until third display field reads 25%, then print screen.

Read measuring value block	1 →
P      1.87 V      50%	00000111

◀ – While observing 1551 display press accelerator pedal until third display field reads 50%, then print screen.

Read measuring value block	1 →
P      2.71 V      75%	00000111

◀ – While observing 1551 display press accelerator pedal until third display field reads 75%, then print screen.

Read measuring value block	1 →
P      3.49 V      99%	00000111

◀ – While observing 1551 display press accelerator pedal until third display field reads 99%, then print screen.

- At this point you should feel the resistance of the kickdown switch.

– Continue pressing accelerator pedal to the pedal stop while observing the fourth digit in the fourth channel.

Read measuring value block	1 →
P      4.35 V      100%	00010111

◀ ♦ Fourth digit must change from 0 to 1, indicating kickdown, hold for approx. 5 seconds (sets throttle angle setting).

– Release accelerator pedal and press “→” button.

– Select function 06 “End output”

– Repeat procedure again.

(Cont. page 3)



# Technical Bulletin

## Example of correct basic setting readings

Read	measuring value	block	1 →
P	0.19 V	0%	00000111
P	1.25 V	25%	00000111
P	2.30 V	50%	00000111
P	3.35 V	75%	00000111
P	4.33 V	99%	00000111
P	4.35 V	100%	00010111

01-A001

- Compare first test voltage readings in second display field and throttle angle percentages in 3rd display field with reading from second test.

If readings are not the same then throttle angle setting was not set properly.

- Road test vehicle. During road test, activate kickdown switch several times.