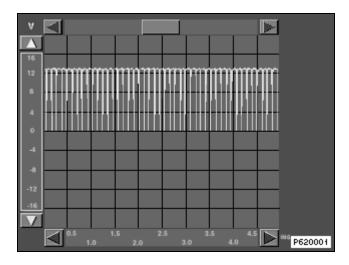
Speedometer A-Signal/Speedometer

The instrument cluster receives the position signal tw from the antilock brake system (ABS)/automatic stability control (ASC)/dynamic stability control (DSC) control module. In this way, the instrument cluster controls the driving speed, total distance recorder and trip recorder displays.

The instrument cluster determines the road speed and distance covered from the distance signal (**tw**) and the number of distance pulses (**K-number**) which is included in the coding data of the instrument cluster. The road speed signal (**speedometer-A**) is made available by the instrument cluster in the form of a frequency for connected systems (radio, C42, cruise control, etc.). Parallel to this, the road speed information is distributed on the bus system for connected systems.

The road speed information of the (**speedometer-A**) signal is represented by the frequency of the signal. All connected control modules must be connected via a resistor to positive supply. Since it is necessary to unplug all connected control modules for testing purposes, the resistor must be simulated by means of the tester in order to check the signal with the oscilloscope.



Signal progression of speedometer-A signal (TAA)

The resistor which is connected to positive supply and is necessary for testing purposes is simulated in order to provide a terminal resistance for the test with the test module when the circuit is open.

The displayed signal progression corresponds to the signal that is obtained during implementation of the test module. The test module specifies a road speed value via the instrument cluster and outputs this value in the form of a signal (TAA).