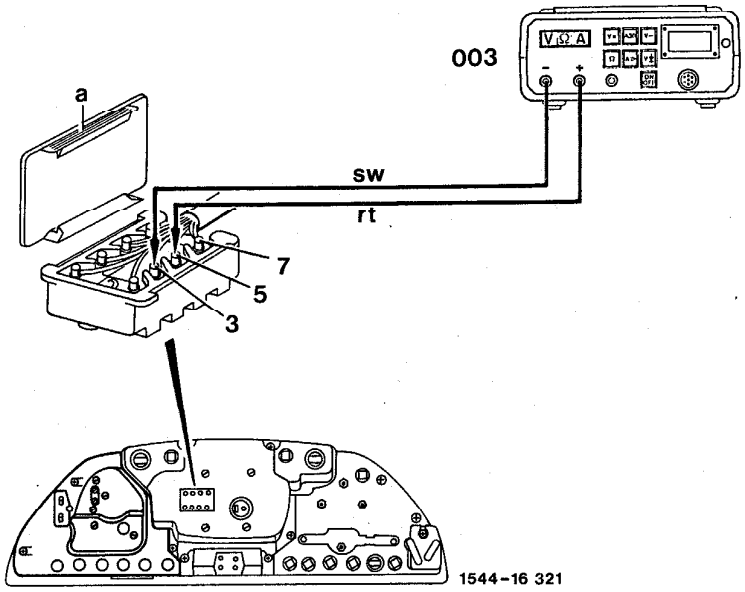
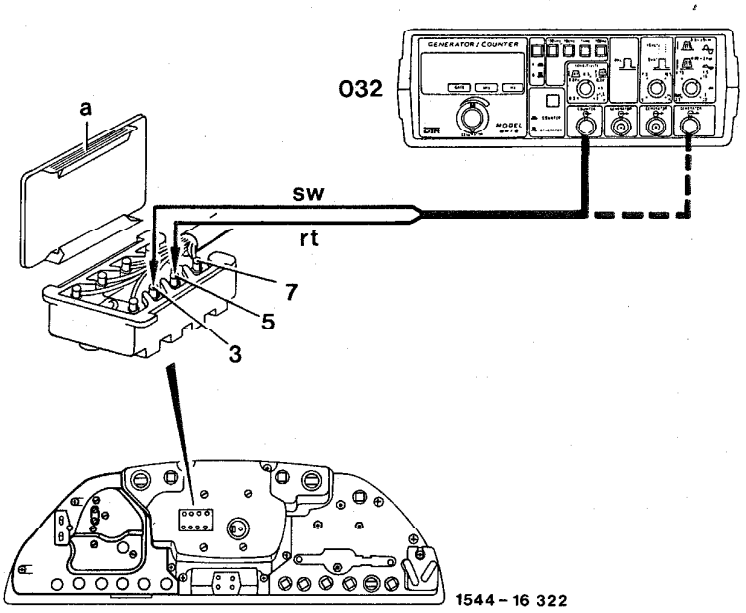
A. Sensor test with multimeter



Instrument cluster	pull out (54–250)
Lid (a)	remove from coupling housing
Resistor	test between jack 3 (ground) and jack 5 (sensor wire) 2 kΩ ± 200 Ω
Voltage	test between jack 3 (ground) and jack 7 (terminal 15)
Key	turn in position 2 (battery voltage)
Multimeter	connect (see figure) red test wire to white sensor wire (jack 5) black test wire to brown ground wire (jack 3) Use electric connection set 201 589 00 99 00
Multimeter	switch on (measuring range: volt ~)
Vehicle	test on the roller test stand or on the road. The voltage must continuously rise with increasing speed at approx. 40 km/h > (greater) 1 V

B. Sensor and speedometer test with function generator



Instrument cluster	pull out (54–250)
Lid (a)	remove from coupling housing
Resistor	test between jack 3 (ground) and jack 5 (sensor wire 2 kΩ ± 200 Ω)
Voltage	test between jack 3 (ground) and jack 7 (terminal 15)
Key	turn to position 2 (battery voltage)
Function generator	connect (see figure) red test wire to white sensor wire (jack 5) black test wire to brown ground wire (jack 3)
Sensor	test (function generator in counter mode)
Vehicle	test on roller test stand or on the road. The frequency value must continuously rise with increasing speed
Speedometer	check (function generator in sinus function mode) The speed indication must increase with rising frequency

Special tool

201 589 00 99 00

Commercially available testers

Multimeter	e.g. Sun, DMM–5 or Avometer 2003
Function generator	e.g. Dynatrade, DTR 8416