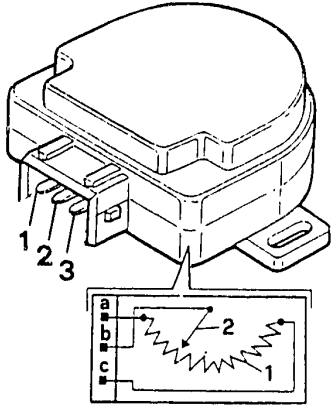
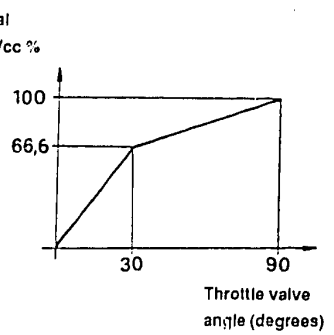
THROTTLE VALVE POSITION SENSOR

This is composed of a potentiometer (1) the mobile part of which (2) is directly controlled by the throttle valve shaft.
During operation the control unit supplies the potentiometer with 5 Volts applied to blades "a" and "b".
On blade "b" a voltage accumulates which is directly proportional the position of opening of the throttle valve.
Depending on the voltage sent by blade "b", the control unit
recognizes the position of the throttle valve and suitably
corrects the mixture ratio.
When the throttle valve is closed an electrical signal of ~ **0.3 V** reaches the control unit. From this signal the control unit recognizes the idle and cut-off conditions on the basis of the engine r.p.m.
For an opening of the throttle valve greater than ~ **30°**, a signal of approximately **3.3 V** returns to the control unit and increases progressively until it reaches a voltage of about **5 V** when the throttle valve reaches its maximum opening of **86°**.





1. Earth (Pin 16)
2. Signal (Pin 30)
3. Power supply + 5 V (Pin 14)