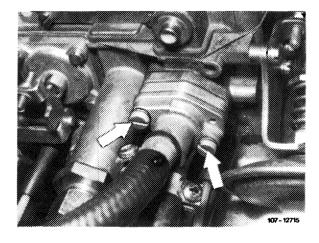
Testing and adjusting values

Combined slide and depth gauge

TN control piston overlap at + 85 °C coolant temperature TN control window opening at + 20 °C		0.8–1.0 mm approx. 2.5 mm
Clamp	0110-70011	000 589 40 37 00
Conventional tool		

Testing, adjusting

- 1 Run engine to operating temperature (coolant thermostat opened (approx. $85\ ^{\circ}\text{C}$).
- 2 After loosening the two fastening screws (arrows) pull out TN choke with water hoses connected.

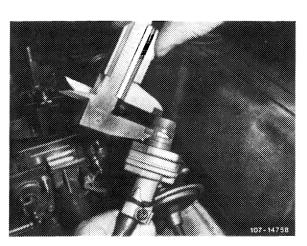


TN choke version 2 with enlarged expansion element and housing

3 Test and adjust TN control piston position. For this purpose, after pulling out TN choke, immediately measure dimension "X" from face up to upper edge of control window directly adjacent to web.

Attention!

Measuring is required immediately because upon cooling down the expansion element will respond and cause control piston to move to another position.



4 Then measure dimension "Y" from face up to edge of control piston.

Dimension "Y" should be 0.8–1.0 mm smaller than dimension "X", so that the control piston will close control window with overlap.

TN control piston overlap: at +85 °C coolant temperature 0.8–1.0 mm.

Measuring dimension "Y"



Screwing out = reducing overlap Screwing in = increasing overlap

Note: At + 20 °C temperature of TN choke, the TN control window should be open by approx. **2.5 mm.** Each 10 °C of temperature change will cause control piston to travel approx. 0.5 mm, i.e. at approx. 70 °C coolant temperature the control window is just closed. At approx. 0 °C the control window is wide open.



7 Let TN choke cool down below + 20 $^{\rm o}$ C (e.g. tap water) and then measure TN control window opening "a"

Nominal value: min. 2.5 mm.

(If control window opening is essentially less, replace TN choke).

8 Reinstall TN choke.

