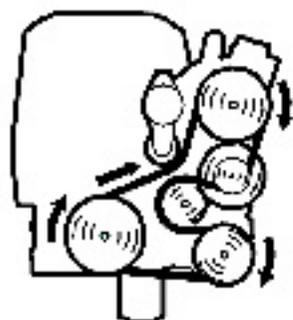


Volvo 480

Adjusting idle



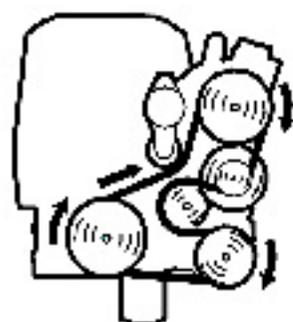
Checking/adjusting the throttle valve housing, idle speed and CO-content

Checking and adjusting the idle speed and CO-content must be done with a **smoothly idling engine at operating temperature and a regular sound from the injectors**

Switch off all current consumers with the exception of the day-running lights.

Blank off the EVAP system with a plug.

Checking/Adjusting throttle valve housing, idle speed and CO-content



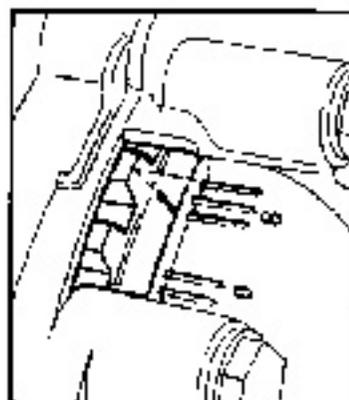
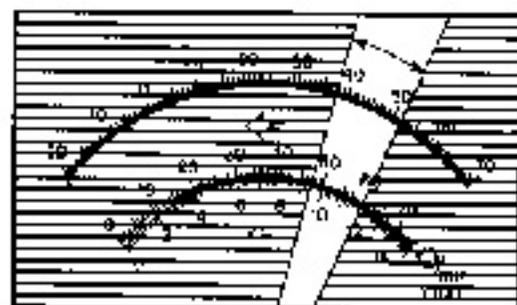
Check timing

Test all spark plugs for correct functioning.

Check the ignition timing at an engine temperature of $> 86^{\circ}\text{C}$:

Should be $8^{\circ} \pm 3^{\circ}$ at 13,8 r/s (825r/min)

Note! the ignition timing point cannot be adjusted; it can only be checked!



B18F : $8^{\circ} \pm 3^{\circ}$ / 13,8 r/s
B18FT : $8^{\circ} \pm 3^{\circ}$ / 13,8 r/s

Check the inlet system for air leakage

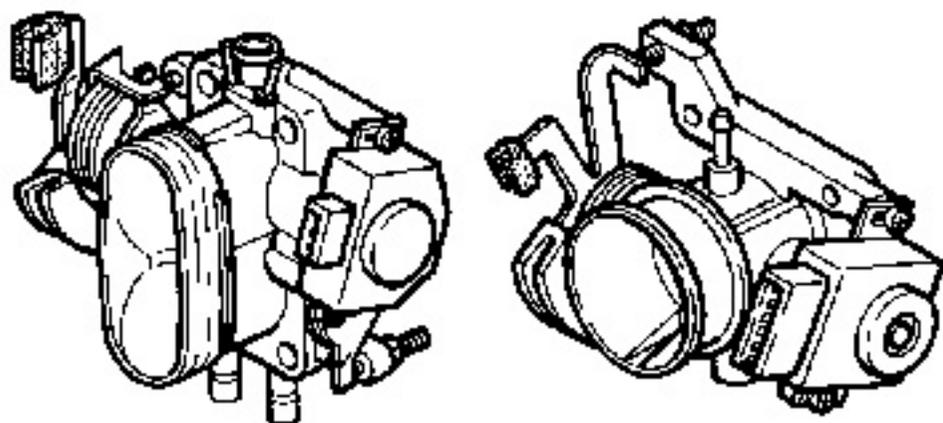
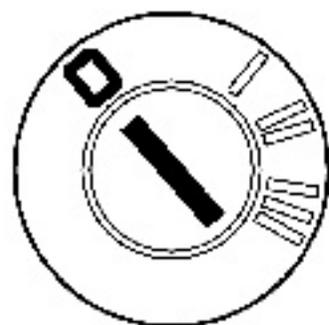
Air leakage between the air mass meter and the engine causes a too lean fuel/air mixture.

For this reason check:

- The inlet system between the air mass meter and the inlet manifold.
- All hoses and hose connections ahead of the inlet manifold.
- The bolted connections and gaskets of the inlet manifold, throttle valve housing, turbocharger, etc.

Correct as necessary, then Continue

Checking/Adjusting throttle valve housing, idle speed and CO-content

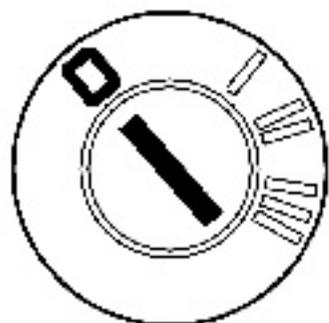


Check the throttle valve housing for dirt deposits

Clean the throttle valve housing as necessary.

- Do this by removing the throttle valve housing and cleaning it with a solvent. Make sure that no solvent enters the throttle valve switch!
- **Note! a throttle valve housing which is contaminated by deposits indicates that the air filter is either blocked, incorrectly fitted or damaged.**
- **Note! Always use a new gasket when fitting the throttle valve housing.**

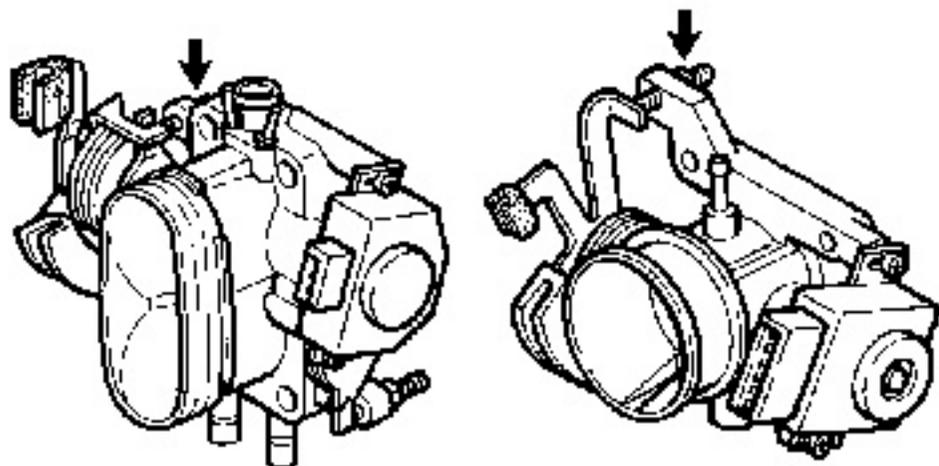
Checking/Adjusting throttle valve housing, idle speed and CO-content



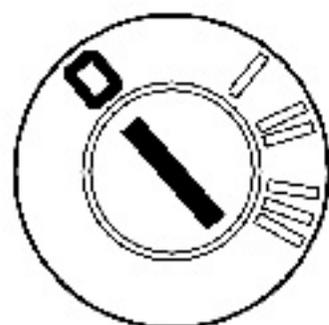
Adjust the throttle valve to the basic setting

Slacken the lock nut

- Back off the adjusting screw until the throttle valve is fully closed.
- Tighten the adjusting screw until it contacts the link rod, then tighten it a further quarter-turn.
- Hold the adjusting screw in the correct position and tighten the lock nut.



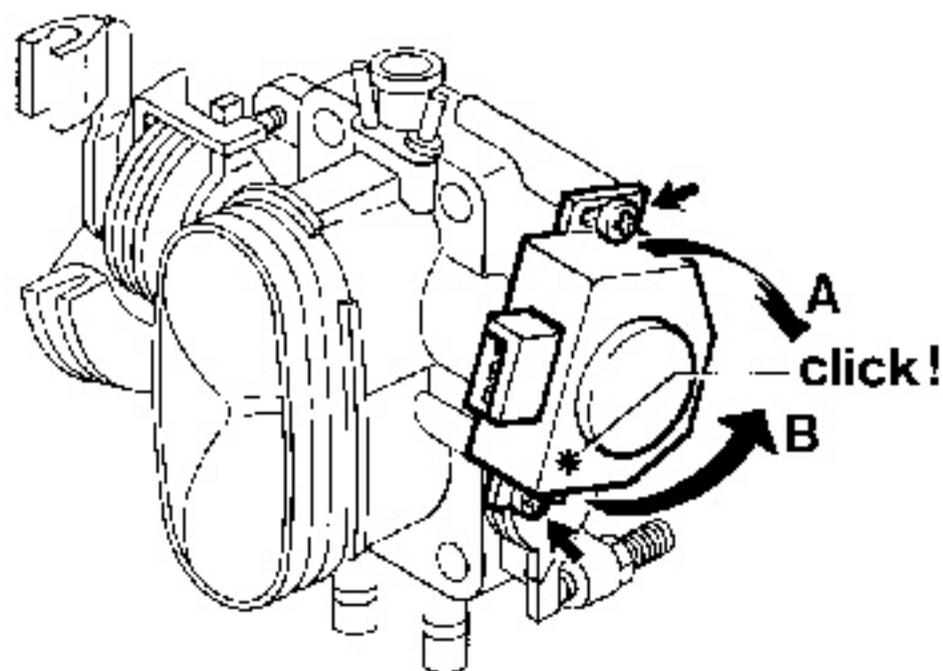
Checking/Adjusting throttle valve housing, idle speed and CO-content



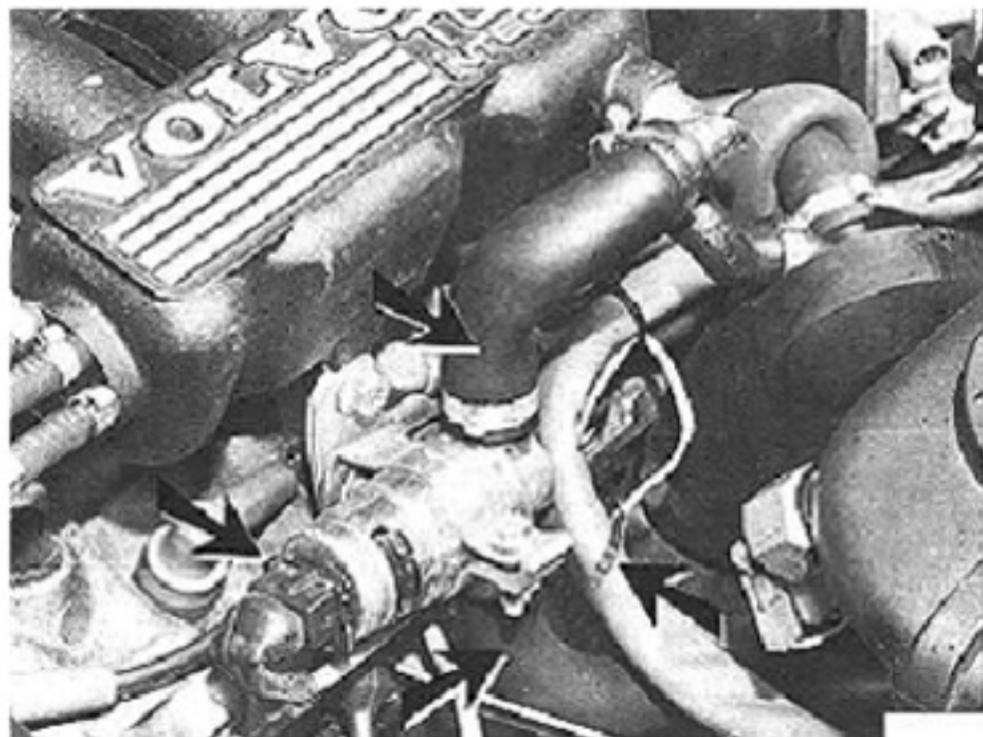
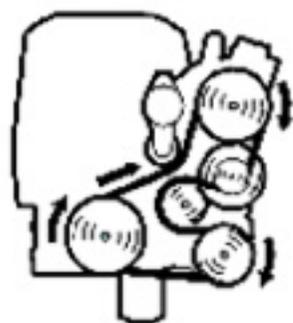
Adjust the throttle valve switch

Slacken the two bolts.

- Turn the throttle valve switch first clockwise (A) and then slowly counter-clockwise (B) until a click is heard.
- Fasten the throttle valve switch in this position (the clicking noise is caused by a microswitch).
- **Check:** the click should be heard with the slightest angular displacement of the valve spindle. If necessary, adjust the throttle cable.



Checking/Adjusting throttle valve housing, idle speed and CO-content



Check the idle speed and adjust the basic setting

Move the idle speed regulating valve to the basic setting by earthing the cable* in the test point near the crankcase ventilation.

*B18F: brown/green; B18FT: brown/grey.

- Switch off the air-conditioning and wait until the thermostat is fully open and the cooling fan has switched itself off.
- The idle speed should then be 11.7 r/s (700 r/min); adjust, if necessary, with the adjusting screw on the throttle valve housing. (brassy screw in front of TB)
- Remove the earth connection from the test point.
- The idle speed should then increase to 13.3 r/s (800 ± 25 r/min).