

Document Title: Auto idling device, description	Function Group: 275	Information Type: Service Information	Date: 15/02/2023
Profile: EC27D Volvo			

Auto idling device, description

Showing Selected Profile

Valid for serial numbers			
Model	Production site	Serial number start	Serial number stop
EC27D Volvo			

The optional auto-idling system, automatically returns the engine speed to idling, when no hydraulic controls are operated to reduce fuel consumption and noise level.

The system can be activated by pressing the auto idle switch (SW2703) in the cab.

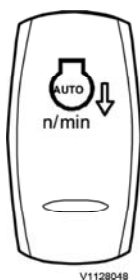


Figure 1

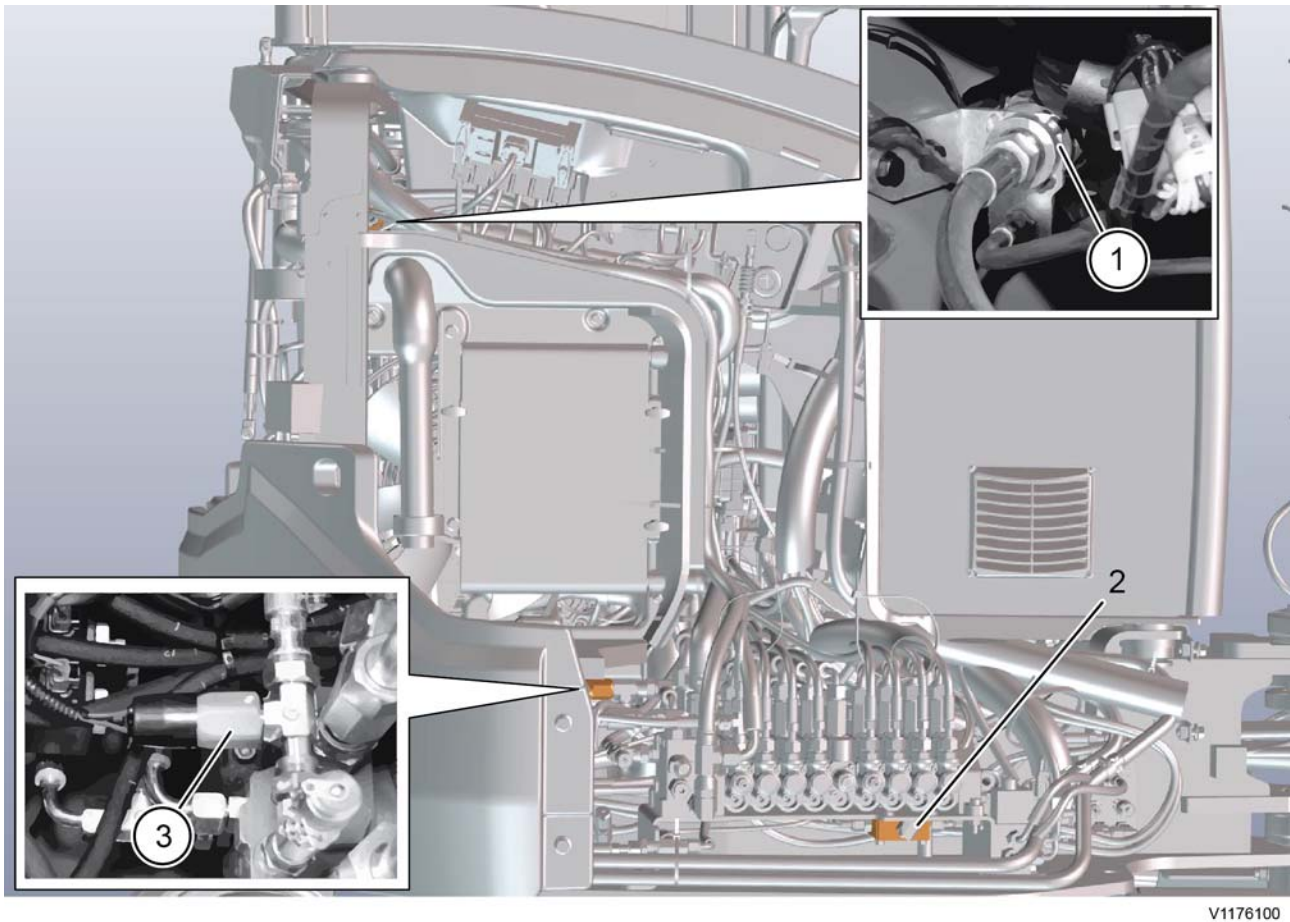
Auto idle switch (SW2703)

Is the hydraulic unlocked (control lockout lever in lower position), the engine speed is lowered with a time delay of 5 seconds, when no controls are operated.

Is the hydraulic locked (control lockout lever in upper position) the engine speed returns to idle immediately when the auto idle function is activated.

For a maximum safety, the engine picks up rpm almost instantaneously to revert to the preselected speed, as soon as the operator operates any control.

Component location



V1176100

Figure 2

Component location, auto idling device

1. Auto idle cylinder
2. Auto idle valve (MA2702)
3. Pressure sensor, auto idle (SE9109)

Function

The auto idle function is controlled by the V-ECU.

Low idle

When no hydraulic controls are operated, the LS-pressure decreases and the auto idle sensor (SE9109) sends no signal to the V-ECU.

The V-ECU sends current to the auto idle valve (MA2702) and the valve drains the pressure in the auto idle cylinder to tank. The spring in the auto idle cylinder retracts the rod and bring the throttle control cable in the low idle position.

Return to preselected speed

When a hydraulic control is operated, the LS-pressure increases and the auto idle sensor (SE9109) sends a signal to the V-ECU.

The V-ECU sends no current to the auto idle valve (MA2702) and the valve gives pressure to the auto idle cylinder. The rod of the cylinder moves out and bring the throttle cable to the normal working position.

NOTE!

Pressure sensor (SE9109), switching pressure 1.4 ± 0.1 MPa (203 ± 14.5 psi)

Complementary information

[Wiring diagram 3](#)

[Hydraulic diagram 1](#)

[Hydraulic diagram, complete](#)