

Exhaust aftertreatment system: to regenerate particulate filter (DPF)

What is regeneration?

Refer to "Exhaust aftertreatment system: principle".

Messages on dashboard display



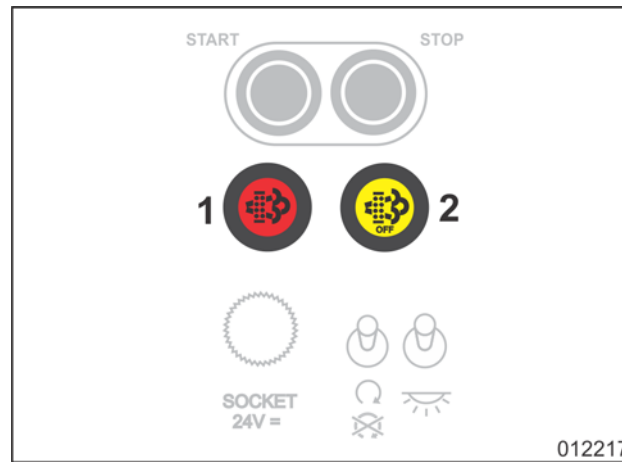
Symbol	Message
	<p>DPF regeneration required</p> <p>Also appears for a few seconds when ignition is switched on.</p>
	<p>High exhaust temperature.</p> <p>The fact that this symbol appears does not mean that there is an engine problem. It only warns you of a high exhaust temperature due to a regeneration.</p> <p>Make sure the exhaust pipe is not directed toward a surface that will burn or melt at high temperature (grass, ..., asphalt!)</p> <p><i>NOTE: Only appears at low vehicle speed.</i></p> <p>Also appears for a few seconds when ignition is switched on.</p>
DPF REGENERATION ACTIVE	The particulate filter goes through a stationary regeneration
DPF REGENERATION INHIBITED	Regeneration inhibited

Figure: regeneration buttons in engine compartment



- 1 "Stationary regeneration request" push-button (with integrated lamp)
- 2 "Regeneration inhibited" push-button (with integrated lamp)

When to regenerate?

If the particulate filter...	then ...
reaches the self-cleaning temperature while driving	regeneration takes place automatically. You don't have to take any action yourself.
does not reach the self-cleaning temperature while driving (e.g. due to frequent stopping)	the "DPF regeneration" symbol will appear after a while. This means that you have to intervene to start the regeneration.

"DPF regeneration" symbol: warning phases

There are four warning phases:

- Phase 1: The "DPF regeneration" symbol appears in order to indicate that the particulate filter has to be regenerated at the next opportunity.
- Phase 2: The "DPF regeneration" symbol flashes to indicate that regeneration has to be performed immediately.
- Phase 3: The "DPF regeneration" symbol flashes together with the "ENGINE WARNING" message. Regeneration has to be performed immediately. Engine power is reduced automatically.
- Phase 4: If you wait any longer, the "STOP ENGINE" message appears. Switch off the engine and call for technical assistance.

How to start regeneration?

- Go for a ride maintaining a high speed for at least 20 minutes (highway) or...
- perform a stationary regeneration.

continued on next page


To perform a stationary regeneration



WARNING!

During a stationary regeneration, engine speed can increase up to 1 000 to 1 500 rpm.

NOTE: Only carry out stationary regeneration with warm engine (coolant temperature above 185°F).

Step	Action
1	Select an appropriate location to park the vehicle. Refer to "Appropriate location for stationary regeneration".
2	Apply the parking brake.
3	Make sure the transmission is in neutral position.
4	Put chocks in front of and behind the wheels.
5	Set up a safety area around the exhaust. Refer to "Safety area around exhaust".
6	Shut off the climate-control system.
7	<p>Press the "Stationary regeneration request" button and hold it for at least 2 seconds.</p> <p>If allowed by engine electronics, the stationary regeneration is started. The engine speed increases. The "DPF regeneration" symbol disappears from the dashboard display and the "DPF REGENERATION ACTIVE" message appears.</p>
8	 <p>WARNING!</p> <p>If an unsafe situation occurs, stop the regeneration process immediately by pushing the brake pedal or by switching off the engine. The regeneration process is also stopped if you momentarily press the "Regeneration inhibition" button.</p> <p>Observe the vehicle and its immediate surroundings during regeneration.</p> <p>The regeneration process takes 20 to 40 minutes. The regeneration has succeeded if the engine speed automatically returns to idling speed and if the "DPF regeneration" symbol does not reappear.</p> <p>If the "DPF regeneration" symbol reappears, the regeneration process has failed. In that case, ask for technical assistance.</p>

continued on next page

**To inhibit/
interrupt
regeneration**

If regeneration causes hazardous situations, you can inhibit/interrupt the regeneration process. To this end, momentarily press the "Regeneration inhibition" button.

The "Regeneration inhibited" lamp comes on. On the dashboard display appears the text "DPF REGENERATION INHIBITED". Only use this function in special circumstances and for a short while.

**Appropriate
location for
stationary
regeneration**

- Surface that will not start to burn or to melt under high temperatures (such as clean concrete; no grass or asphalt!);
- Away from anything that can burn, melt or explode;
- Not near gas or vapors that can ignite, explode or contribute to a fire (such as LPG, diesel vapors, ...).

**Safety area
around
exhaust**

- If bystanders can access the area, set up barriers at least 5 ft away from the exhaust.
 - If regeneration takes place in a confined space, connect an exhaust gas evacuation system to the exhaust pipe. The evacuation system has to resist temperatures of at least 1 500°F.
 - Keep a fire extinguisher nearby.
-