

For vehicle equipped with Cummins engine

How to use regeneration control DPF

The regeneration control DPF system collects soot (particulate) contained in exhaust gas into the ceramic filter inside the muffler. When the accumulated soot reaches a specified level, the system performs automatic regeneration (removal by combustion) while the machine is traveling or being operated (DPF automatic regeneration). The automatic regeneration may not be completed during repetitive start/stop or continuous traveling at low speed. In such a case, it is necessary to stop the machine and perform manual regeneration (DPF manual regeneration). When manual regeneration is required, it is notified by the lighting or flashing of the DPF warning. Park the vehicle in a safe place and perform manual regeneration.

1 Lighting/Flashing of DPF warning



WARNING

Do not perform the DPF manual regeneration in an area with poor airflow. It can cause carbon monoxide poisoning.



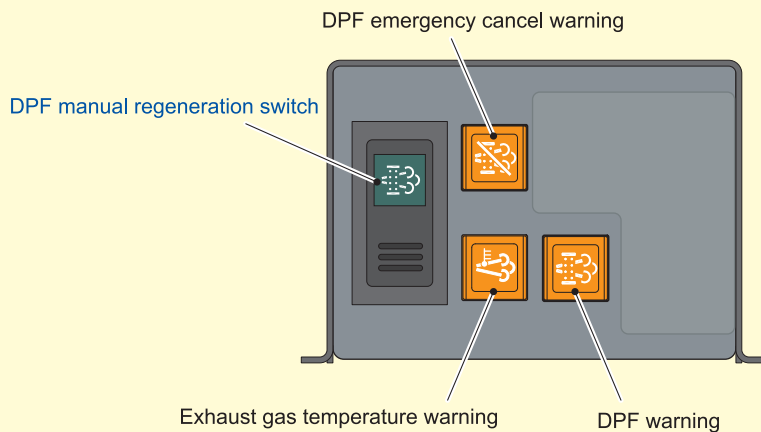
CAUTION

When stopping the machine during the automatic regeneration or performing the manual regeneration, check that there are no flammable items near the exhaust opening.

Because the exhaust gas temperature is high, flammable items can cause a fire.

Do not touch the exhaust pipes, area near the muffler, and exhaust gas. It can cause burn injury.

While the exhaust gas temperature warning is lit, the exhaust gas temperature is extremely high. Pay special attention to the surroundings.



If DPF warning lights up/flashes.



Perform DPF manual regeneration.



If DPF warning is lit.

Perform manual regeneration soon.
* Traveling or operating the machine with the DPF warning being lit may change the status of the DPF warning from lighting to flashing.



If DPF warning is flashing.

Stop traveling or operation, and immediately perform manual regeneration.
* The engine output begins to decrease.

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2 Procedure of manual regeneration

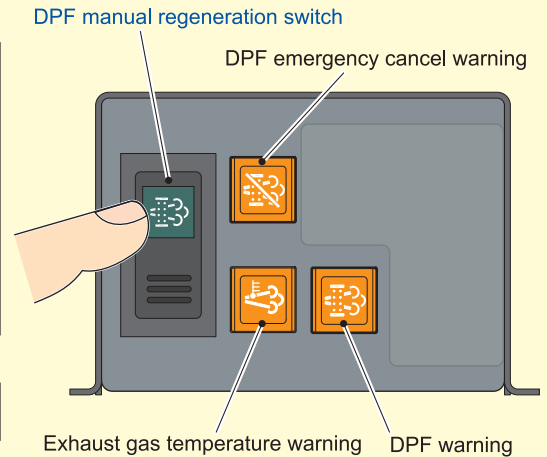
(The manual regeneration can be performed only when the DPF warning is lit or flashing.)

- 1 Park the vehicle in a safe place.
* Because the exhaust gas temperature is high during the regeneration, check that there are no flammable items near the exhaust opening.

- 2 Set the machine in the following status.
 - Parking brake switch: "PARK"
 - Shift lever: "N"
 - PTO switch: "OFF"
 - Idling adjuster knob: "SLOW"
 - Release the accelerator pedal.
 * Warm up the engine if the water temperature is low.

- 3 Press and hold the DPF manual regeneration switch for 5 seconds.

- 4 The engine speed is increased to 1000 min⁻¹{rpm}, and the manual regeneration begins.
The manual regeneration process takes approximately 30 to 40 minutes.
During the DPF regeneration, the exhaust gas temperature warning lights up and the DPF warning goes out.
The manual regeneration is completed when the exhaust gas temperature warning goes out.
* The manual regeneration period may vary depending on the amount of accumulated soot and other conditions.



If traveling or operating of the machine is continued without performing DPF manual regeneration, the engine warning lights up and the engine output decreases. Traveling or operating the machine with the engine warning being lit may cause engine trouble. Contact your nearest TADANO distributor or dealer immediately.



3 Engine oil

To maintain the DPF functions for a long period of time, use the designated engine oil dedicated to DPF (JASO standards: DH-2 or higher).

For brands of engine oil, refer to the engine manual.

4 Fuel

Use only ultra-low sulfur diesel (diesel contains 15 ppm sulfur or lower) for this machine.

Using fuels other than the specified ones may cause troubles in DPF and engine.

Be sure to read this manual before use. For details, refer to Operation Manual.