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**Notes**

**The components of the system and their function**

The air filter (1) protects the engine by retaining impurities from the air flow entering the engine

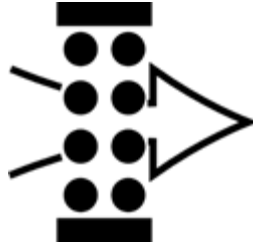
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Associated pictogram:



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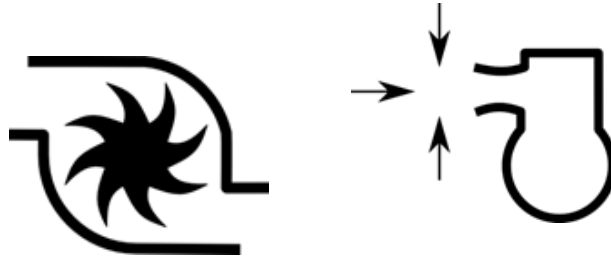
During normal conditions of use the reading should indicate from 10 to 15 inches H<sub>2</sub>O. When the indicator moves beyond 20 inches H<sub>2</sub>O, this means that the air filter is dirty and needs to be cleaned or changed. Fuel consumption will increase if the filter is not clean.



The air will continue its way to the **Turbocharger** (2), whose task is to force additional air into the combustion chamber in order to produce a bigger detonation, which will increase the engine's power. The air will then be directed to the **Air Radiator** (4) (air to air) via a **Flexible tubing** (3). The purpose of this radiator is to cool the air passing through it in order to increase its density. Following its way through the passage of another **Flexible tubing** (5) and the **Intake Tubing** (6), the air will finally finish its race in the **Engine** (7).



Associated pictograms :



The more the engine is under load, the more the Turbo (2) pressure will increase. The maximum pressure varies from one engine to the other. When the engine is not under load, it is normal for the pressure to be at zero. It is the exhaust gas that will drive the turbine. These gases will be directed towards the particle filter (8).

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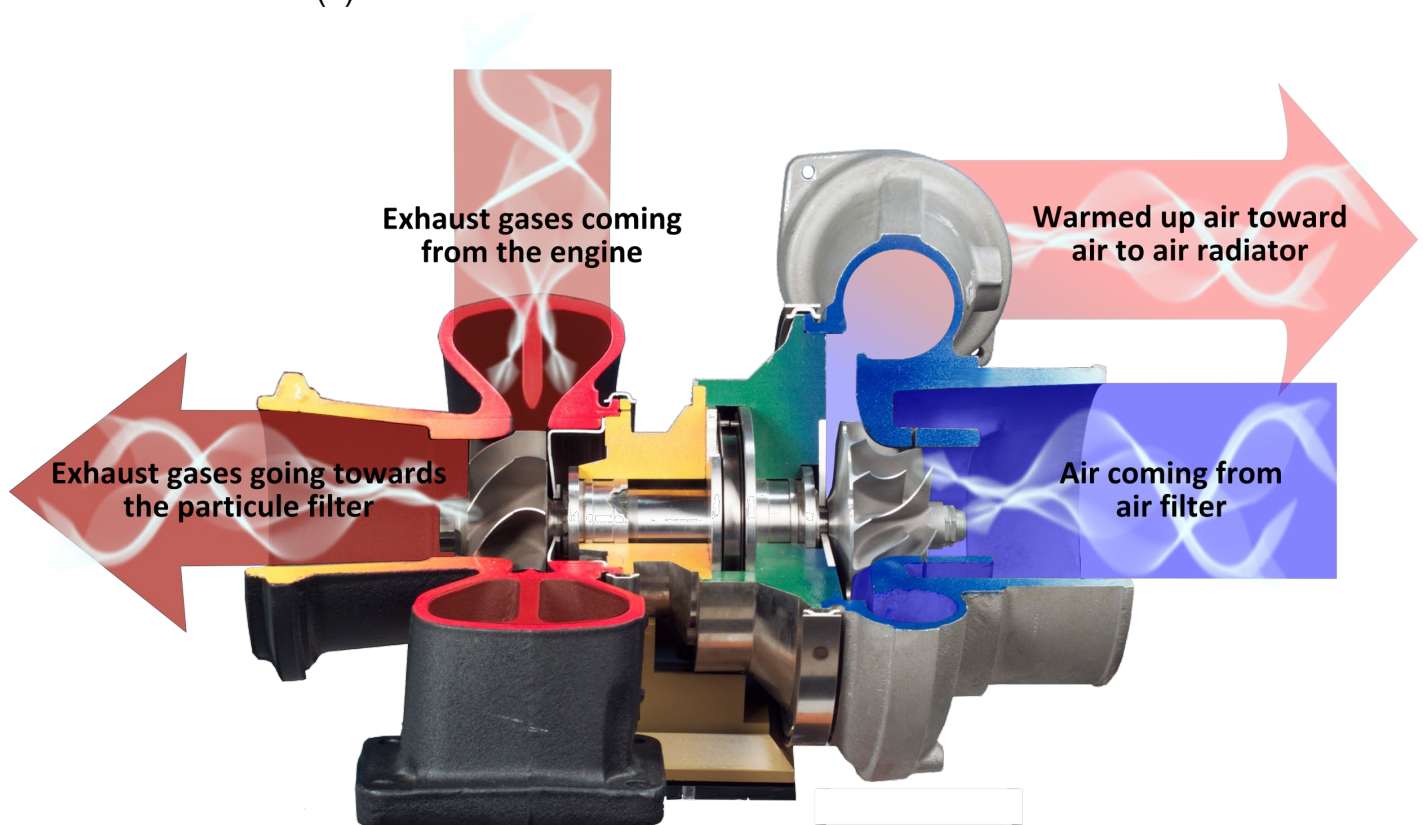
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Turbo cross section (2)



## Régénération stationnaire induite par le conducteur

### Les 4 conditions préalables:

La température du moteur doit avoisiner les 170 degré F

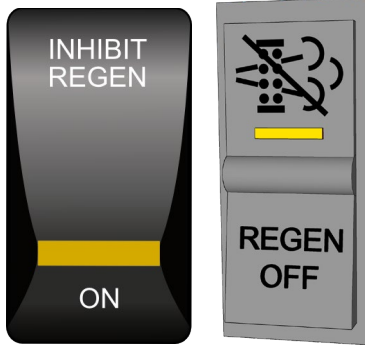
La transmission doit être au neutre

Les freins de stationnement doivent être appliqués

L'interrupteur doit être maintenu autour de 5 secondes

**ATTENTION:** Certains véhicules sont équipés d'interrupteur d'inhibition. S'assurer que celui-ci n'est pas en fonction.










### Particle filter switch

It is used to start the regeneration process when the truck is parked.

### Pictograms associated with the particle filter (8) and meanings




| Pictograms  |  | Meaning   | Actions to undertake   |
|---|--|---|--|
|  | <b>Level 1</b><br>(Light on)   | Recommended exhaust filter regeneration.  | While driving on the highway at the speed permitted or start the process of regeneration while parked. |
|  | <b>Level 2</b><br>(Light on and flashing)  | Exhaust filter regeneration required.   | While driving on the highway at the speed permitted or start the process of regeneration while parked. |
|  | <b>Level 3</b><br>(Light on and flashes in addition the motor "warning light" is on) | The filter is reaching its maximum capacity. Regeneration of the exhaust filter required. <b>The engine power will be diminished.</b> | The vehicle must be parked and the driver begins the regeneration process.                             |




|   |   |   |   |
|---|---|---|---|
|  | <p><b>Level 4</b><br/>(Light on and flashes in addition the "check engine warning" and "engine danger" lights are on)</p> | <p>The filter has exceeded its maximum capacity.<br/>Exhaust filter regeneration required.</p>                                    | <p>The vehicle must be parked and begin the regeneration process.<br/><b>The engine may turn off and a troubleshooting service is required.</b></p> |
|  | <p>Exhaust gases can reach a dangerous temperature</p>  | <p>Depending on the temperature exhaust outlet, be careful about where to park the vehicle before you start the regeneration.</p> |   |

Finally, the **Diesel Exhaust Fluid (DEF) (9)** is injected into the **Catalytic converter (10)** for the purpose of significantly reducing the pollutant emissions of nitrogen oxides (NOx).

**Pictograms and gauges associated with the Diesel Exhaust Fluid (10) and meanings.**

| Pictograms  |   | Meaning   | Actions to undertake  |
|---|---|---|---|
|  | <p><b>Level 1</b><br/>(Light on)</p>  | <p>DEF level is low. Fill up a.s.a.p</p>  | <p>Initial warning: the engine is operating normally. The DEF level is 10% or lower.<br/><b>Fill it up.</b></p> |
|  | <p><b>Level 2</b><br/>(Light on and flashing)</p>   | <p>DEF level is low, Fill up a.s.a.p</p>  | <p>The engine is operating normally. The DEF level is 5% or lower.<br/><b>Fill it up.</b></p>                   |
|  | <p><b>Level 3</b><br/>(Light on and flashes in addition the "check engine warning" light is on)</p> | <p>DEF level is low, Fill up immediately.<br/><b>The engine power will be diminished.</b></p> | <p>Engine performance is limited. The level of the DEF is 2.5% or lower<br/><b>Fill up.</b></p>                 |



|   |   |   |  |
|---|---|---|--|
|  | <p><b>Level 4</b><br/>(Light on and flashes in addition the "check engine warning" and "engine danger" lights are on)</p> | <p>DEF level is low, fill up immediately. <b>Engine power is reduced to 8 km/h (5 mph).</b></p> | <p>The speed of the vehicle is limited to 8 km/h (5 mi/h)<br/><b>Fill it up.</b></p> |
|---|---|---|--|

**Notes**

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