# Engine Lamp Identification Guide.

For Cummins On-Highway, Heavy Duty and MidRange Engines With Aftertreatment.

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Description</th>
<th>Driver Action</th>
</tr>
</thead>
</table>
| ![Check Engine Lamp](image) | **Check Engine Lamp**  
Lights up to warn the driver to seek service soon.  
**Flashing Check Engine Lamp**  
Will flash for 30 seconds at key ON if maintenance is due. | Service must be performed at earliest opportunity. Vehicle may still be operated until end of shift. |
| ![Malfunction Indicator Lamp (MIL)](image) | **Malfunction Indicator Lamp (MIL)**  
Lights up to warn the driver to schedule service soon. May light up in addition to other lamps. | |
| ![Red Stop Engine Lamp](image) | **Red Stop Engine Lamp**  
Indicates that engine must be stopped as soon as it is safe to do so.  
**Flashing Red Stop Engine Lamp**  
Indicates driver has 30 seconds to stop vehicle safely before automatic engine shutdown (if the Engine Protection Shutdown feature is enabled). | Vehicle must not be operated. Arrange for immediate service. |
| ![High Exhaust System Temperature (HEST) Lamp](image) | **High Exhaust System Temperature (HEST) Lamp**  
Indicates that high exhaust temperatures may exist due to aftertreatment regeneration. | Make sure exhaust pipe outlet is not directed at any combustible surface or material. If excessive odor or white vapor are present, have exhaust system inspected for leaks. |
| ![Aftertreatment DPF Lamp](image) | **Aftertreatment DPF Lamp**  
Indicates that the aftertreatment Diesel Particulate Filter (DPF) requires regeneration.  
**Flashing Aftertreatment DPF Lamp**  
Aftertreatment DPF requires regeneration. Engine power may be reduced automatically. | 1. Make sure the DPF Switch is not in the Inhibit position.  
2. At earliest opportunity, bring vehicle to highway speed for at least 20 minutes.  
3. If previous step is not possible, or if lamps remain illuminated, perform a parked regeneration.  
Note: An illuminated HEST Lamp will indicate that regeneration is underway. |
| ![Flashing Aftertreatment DPF Lamp & Check Engine Lamp](image) | **Flashing Aftertreatment DPF Lamp & Check Engine Lamp**  
Aftertreatment DPF requires immediate regeneration. Engine power will be automatically reduced further. | |
| ![Red Stop Engine Lamp and Aftertreatment DPF Lamp](image) | **Red Stop Engine Lamp and Aftertreatment DPF Lamp**  
Aftertreatment DPF regeneration has not been completed successfully in a timely manner. | Vehicle must not be operated. Arrange for immediate service. |
### Four Stages Of DEF-Related Warnings.

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Description</th>
<th>DEF Gauge</th>
<th>Driver Action</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td><strong>Solid Diesel Exhaust Fluid (DEF) Lamp</strong>&lt;br&gt;DEF level is low.</td>
<td><img src="DEF_Gauge.png" alt="DEF Gauge" /></td>
<td>Refill DEF tank with correct type of DEF.</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Solid DEF Lamp and Check Engine Lamp</strong>&lt;br&gt;Indicates lower DEF level, incorrect DEF type or an SCR system issue. Driver will experience a mild loss of engine power.</td>
<td><img src="DEF_Gauge.png" alt="DEF Gauge" /></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td><strong>Flashing DEF Lamp and Solid Check Engine Lamp</strong>&lt;br&gt;Indicates that DEF level is critically low, incorrect DEF type or an SCR system issue for more than five hours. Driver will experience a severe loss of engine power.</td>
<td><img src="DEF_Gauge.png" alt="DEF Gauge" /></td>
<td>Refill DEF tank with correct type of DEF as soon as possible. If lamps stay on, schedule service immediately.</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Stop Engine Lamp with Flashing DEF Lamp and Solid Check Engine Lamp</strong>&lt;br&gt;Indicates that DEF level is critically low and fuel tank has been refilled without refilling DEF tank, or engine has idled for an hour or been shut down. Vehicle will be limited to a speed of 5 mph.</td>
<td><img src="DEF_Gauge.png" alt="DEF Gauge" /></td>
<td></td>
</tr>
</tbody>
</table>

### How To Perform A Parked Regeneration.

If the vehicle has a DPF Switch and the DPF Lamp is flashing:
1. Park vehicle, and set up a safe exhaust area. Confirm that there is nothing on or near the exhaust system surfaces.
2. Set parking brake, and place transmission in Park or Neutral.
3. Make sure that your fast-idle and Power Take-Off (PTO) switches are off.
4. Push the DPF Switch into the ON position to start the parked regeneration.
5. Engine speed will increase throughout the duration of regeneration, and exhaust gas and exhaust surface temperatures will remain higher than normal for three to five minutes after regeneration is complete.
6. Allow up to one hour for the regeneration, and monitor the vehicle and the area around it during the process.

Note: If any unsafe condition occurs while regeneration is in process, shut off the engine immediately by depressing the clutch, brake or throttle pedal.


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**Note:** To ensure that the correct DEF is used, Cummins recommends the use of Fleetguard® Diesel Exhaust Fluid or any DEF that meets ISO22241 specifications.