GENUINE CUMMINS RECON® DPF
EPA 2010 TO CURRENT
ISB, ISL, ISX ENGINES
ALWAYS ON
THE IMPACT OF YOUR DPF.

The Diesel Particulate Filter (DPF) is a critical component of the modern diesel engine. Designed to capture and keep diesel particulate matter, nitrogen oxide and hydrocarbons from entering the air we breathe, DPFs play a critical role in meeting EPA standards for diesel engine exhaust quality.

1. DPFs utilize an oxidizing catalyst to control hydrocarbons and trap them inside the channel walls of the DPF. To keep air flowing through the DPF, the built-up material must be burned off or oxidized through a process called regeneration.

2. During normal operation of the engine, the DPF will self-regenerate when exhaust gases reach a temperature of 1,000° F (538° C); in the absence of these conditions, the engine systems will create a forced regeneration. This regeneration burns the trapped hydrocarbons and leaves ash behind.

3. Over time and depending on the duty-cycle of the engine, this ash will build up, resulting in decreased performance of the DPF and increased engine back pressure. Too much back pressure will decrease fuel economy and can cause costly failures to engine components like the turbocharger.

At this stage, it’s time to consider preventative maintenance. This is generally around 200,000 miles; however, 2017 and newer ISX engines can go as many as 500,000 miles before servicing.
DPF MAINTENANCE.

Knowing exactly when, how and what type of DPF maintenance to perform can be confusing and frustrating. Upstream engine conditions, oil quality and engine duty-cycle all play critical roles in how quickly ash will accumulate. Once this threshold is reached, maintenance options include: replacement with a Genuine Cummins DPF or a field-cleaning. While there are some non-genuine options for DPFs, Cummins warns against using any part that hasn’t been validated, designed and tested to meet OEM specifications.

<table>
<thead>
<tr>
<th></th>
<th>Cummins Genuine New DPF</th>
<th>Cummins ReCon DPF</th>
<th>Field-Cleaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>$1,600 to $2,400</td>
<td>$800 to $1,200</td>
<td>$200 to $500</td>
</tr>
<tr>
<td></td>
<td>Depending on engine model</td>
<td>Depending on engine model</td>
<td></td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Best</td>
<td>Better</td>
<td>Variable*</td>
</tr>
<tr>
<td></td>
<td>100% OEM ash holding capacity</td>
<td>95% or more of the original ash holding capacity is restored</td>
<td>Between 0% to 90% original ash holding capacity is restored</td>
</tr>
<tr>
<td><strong>Downtime</strong></td>
<td>Less Than 1 Hour</td>
<td>Less Than 1 Hour</td>
<td>3 to 8 Hours*</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Best</td>
<td>Better</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Genuine OEM part</td>
<td>Only genuine OEM parts are remanufactured. Only negligible amounts of ash remain</td>
<td>Flow bench verifications of field-cleanings do not accurately show how much ash remains*</td>
</tr>
<tr>
<td><strong>Recommended Service</strong></td>
<td>200,000 to 400,000 miles**</td>
<td>200,000 to 400,000 miles**</td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>1 Year/100,000 miles recognized at all Cummins certified service locations</td>
<td>1 Year/100,000 miles recognized at all Cummins certified service locations</td>
<td>Usually none. If a warranty is offered, it would need to be taken back to the original service provider</td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF POOR DPF MAINTENANCE**
- Unexpected Regeneration Frequency
- Increased Engine Backpressure That Could Damage Upstream Engine Components
- Increased Downtime Due to More Frequent Cleanings
- Reduced Fuel Economy

**UPSTREAM FAILURES THAT CAN AFFECT DPF PERFORMANCE**
- Leaking Injectors
- Excessive Idling
- Coolant Leaks
- Turbo Failures
- Exhaust Leaks: EGR, Manifold and Exhaust Pipes
- Doser Valve and Doser Injector Issues
- Sensors and Wiring Failures

If these failures occur, it is important to inspect the DPF to ensure the upstream failure does not have a negative impact on the DPF.

*Dependent upon incoming quality of the DPF and cleaning machine technology used. If a DPF is too clogged, field-cleaning will not work, and the DPF will have to be replaced. Most field-cleaning methods leave behind more than 5% of hard-to-remove ash which means additional ash will accumulate more quickly.

** Recommended service intervals are based on optimal duty-cycles where regenerations occur naturally. When extreme duty-cycles or negative upstream engine conditions exist, the DPF should be serviced more frequently. Recommended service intervals can be viewed on quickserve.cummins.com.
CUMMINS REMANUFACTURING PROCESS:

A Cummins ReCon product is the smart, lower-cost option when you need to replace your DPF. Our 9 step remanufacturing process leads the way in terms of ash removal and restoration of DPF performance.

1. Core Acceptance
2. Core Inspection
3. Bake
4. Air
5. Submersion in Proprietary Solution
6. Air
7. Air Flow Inspection
8. Proprietary Visual Imaging Inspection
9. Pass/Fail
   Pass is reintroduced to market.
WHY RECON BEATS FIELD-CLEANING:

Cummins has been perfecting our DPF technology for over 10 years. As innovators of aftertreatment technology, we’ve spent millions in research and development on our proprietary remanufacturing process. Various field-cleaning methods may temporarily improve the performance of your DPF, but you never know what it leaves behind.

The white matter shown here is ash that has accumulated over time. Cummins remanufacturing process is proven to be much more effective at ash removal than field-cleaning.

CUMMINS RECON®

✔ Cummins ReCon DPFs are subjected to a thorough inspection process before they’re remanufactured. Any DPF that doesn’t meet OEM quality standards for acceptance is scrapped upfront.

✔ Unlike typical cleaning machines, our remanufacturing process utilizes a proprietary liquid solution that breaks down “hard-to-remove” ash for optimal performance.

✔ The ReCon DPF is subjected to an additional bake process that couples with pneumatics to further remove any remnants of particulate matter retained in the filter.

✔ All ReCon DPFs are subjected to an exhaustive testing procedure, including air flow restriction tests and digital imaging that allows Cummins to see inside every DPF cell to ensure the thorough removal of ash. This rigorous process ensures ReCon DPFs meet the reliability standards of Genuine New DPFs.

FIELD-CLEANED

✗ Without a Cummins certified inspection, a substandard DPF might be reused.

✗ Utilizes a common “bake and blow” cleaning process where a regeneration (bake) is performed and then high-pressure air is forced through the channels (blow).

✗ Cleaning process removes the majority of the light, “easy-to-remove” ash, however a crust layer of thicker, “hard-to-remove” ash can remain.

✗ New ash begins to collect at the crust, which further blocks the DPF, leaving a second field-cleaning useless.

✗ Various field-cleaning methods may temporarily improve the performance of your DPF and get you back on the road, however air cleanings alone are generally ineffective when it comes to the “hard-to-remove” ash that clings to the DPF cell walls.
CUMMINS RECON GETS THE ASH OUT.

We put our remanufacturing process to the test and compared it to cleaning methods that could damage upstream engine components, and the results are eye-opening. On average, our proprietary remanufacturing process removes 2.75 lb more ash than the tested cleaning methods.

INCOMPLETE CLEANING:

These x-ray images reveal how use of a competitive cleaning machine results in a less comprehensive ash removal.

Cummins Remanufacturing Process
Cummins: -3.94 lb

With a new, “never been used” weight of 43.497 lb the removal of 3.94 lb of soot and ash restored 98.4% of the DPF ash capacity. The others don’t come close.
ALWAYS STAY GENUINE.

Why would you spend more money on a non-genuine product that hasn’t been designed or manufactured to the highest quality specifications? Let’s take a deeper look at why Cummins genuine parts are the better choice:

**BETTER VALUE:** A ReCon DPF is more cost-effective than a non-genuine DPF while maintaining Cummins quality, warranty and access to our world-class service network of over 4,000 locations.

**BETTER PERFORMANCE:** A Cummins DPF’s sole purpose is to trap and eliminate soot as efficiently and effectively as possible; typical non-genuine DPFs may cut corners by using inferior materials containing little-to-no precious metals. These precious metals help accelerate that soot-burning process and maintain overall performance for the whole aftertreatment system while maintaining fuel efficiency for your engine’s lifespan.

**THE GENUINE DIFFERENCE:** ReCon DPFs are proven to show similar performance to new DPFs due to our 95% or more ash removal criteria and extensive remanufacturing process. Like new Cummins DPFs, genuine Cummins ReCon DPFs are designed and tuned specifically to your engine’s performance levels and controls, ensuring the engine’s peak reliability on the road.

BETTER TO THE CORE.

Because Cummins gives full credit for any genuine Cummins DPF core regardless of condition, exchanging your used DPF for a Cummins ReCon DPF helps reduce your cost even further. ReCon DPFs truly are the most cost-effective, worry-free method for keeping your aftertreatment system working properly and getting you back on the road quickly.
WE’VE GOT YOUR BACK.

Cummins ReCon DPFs come with a full 1 year/100,000 mile warranty. This comprehensive warranty ensures that every Cummins ReCon DPF is backed 100% for parts, labor, peace of mind and financial protection. What makes it even better? The fact that it is honored at over 4,000 authorized locations throughout North America.

QUESTIONS?

For more information about Cummins ReCon DPFs, call Cummins Care at 1-800-CUMMINS™ (1-800-286-6467). To find the Cummins-authorized parts and service facility nearest you, visit cummins.com.

Remanufactured DPFs are not for sale in California.