Customer Value Proposition:

In a robust, compact package, the patented Racor CCV closed crankcase ventilation filter systems provide superior oil coalescence and crankcase pressure control under the most severe conditions.

The only routine maintenance required for the Racor Crankcase Ventilation Filter System is filter replacement. Typical service life of the high-performance filter in diesel applications is 750 hours. Some variations in service life occur depending on load profile, engine wear condition, flow and aerosol mass concentration of crankcase emissions, and soot concentration.

Product Features:

- Eliminates vapors from going to environment
- Eliminates oil from dripping on the ground or engine compartment
- Reduces the risk of fire in the engine compartment
- Keeps engine components clean and aids in maintaining the engines efficiency
- Great for remote applications where fast and easy service is not readily available.

Contact Information:

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The Crankcase Ventilation system works by pulling the vapors from the crankcase and coalescing the oil from the air. The clean air is returned to the engine via the air intake system, while the filtered oil is returned through the CCV drain.

Filtering the aerosols from the blow-by gas is only half of the requirements for a Racor CCV. Once the oil has collected in the media, it must be released. For any given flow rate and upstream pressure on the media, a specific saturation level is achieved. Media saturated with oil is very different than media plugged with dust or dirt. Here is where the CCV filter departs from any similarity with air filters. The two are often confused by customers and our competitors alike. Although the fluid that flows through a CCV media is gaseous and mostly air, the CCV filter is primarily a coalescing filter, not a particle trap like an air filter. Air filters rely on the impaction of particles to separate the solids from the air stream. Air filters also use the dirt itself to create a surface cake of particles to sieve more particles from the air passing through the pleated walls of the medium.

The life expected in a CCV filter has to do with its ability to drain oil. Engine air filters typically provide ample surface area to collect numerous amounts of particles.

CCV filters must coalesce aerosols to collect an amount of liquid downstream. Oil is a liquid. When oil is in aerosol form, it is still a liquid. As aerosol particles join together in the media, they pool together. The pools are formed into droplets, and the droplets eventually are pushed to the downstream side of the media. As the droplets grow, they are shed out of the media and trickle off of the outer surface. This process of growing small particles into droplets and shedding them is the act of coalescing.

### Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>CCV4500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>9.25&quot; / 235.0 mm</td>
</tr>
<tr>
<td>Maximum Opening Width (Including clamps &amp; bracket)</td>
<td>7.50&quot; / 190.5 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>5.60&quot; / 142.2 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>3.26 lbs / 1.48 kg</td>
</tr>
<tr>
<td>Filter Removal Clearance</td>
<td>2.25&quot; / 57.2 mm</td>
</tr>
<tr>
<td>Replacement Element (Media Density: High)</td>
<td>CCV 55248-08</td>
</tr>
<tr>
<td>Replacement Element (Media Density: Ultra Efficiency)</td>
<td>CCV 55248-10</td>
</tr>
<tr>
<td>Housing Material</td>
<td>Die cast head, glass-filled nylon and black powder epoxy-coated steel bowl.</td>
</tr>
<tr>
<td>Inlet &amp; Outlet Thread Size</td>
<td>1 3/16&quot; - 12 STOR</td>
</tr>
<tr>
<td>Max. Cubic Feet per Minute</td>
<td>10 cfm / 283 lpm</td>
</tr>
<tr>
<td>Crankcase Pressure Regulator</td>
<td>Integral</td>
</tr>
<tr>
<td>Bypass/Change Indicator</td>
<td>Integral or Remote</td>
</tr>
<tr>
<td>Engine Block Check Valve Return Fitting</td>
<td>1/4&quot; NPT</td>
</tr>
<tr>
<td>Swivel Fitting (Qty.)</td>
<td># 6 JIC (2pcs.)</td>
</tr>
<tr>
<td>Oil drain hose I.D.</td>
<td>.375&quot;</td>
</tr>
</tbody>
</table>

Additional details are available in technical manual #55021.