Longblock guidelines, 4.3L

Models: 4.3GL, see list

4.3L Models covered by this bulletin:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3868941</td>
<td>4.3GL Petersburg</td>
<td>4.3GL-B</td>
</tr>
<tr>
<td>3869053</td>
<td>4.3GL-PEF</td>
<td>4.3GL-A</td>
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<tr>
<td>3869174</td>
<td>4.3GL-C</td>
<td>4.3GL-C</td>
</tr>
<tr>
<td>3869113</td>
<td>4.3GL-D</td>
<td>4.3GL-D</td>
</tr>
<tr>
<td>3868942</td>
<td>4.3GL-E</td>
<td>4.3GL-E</td>
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</tbody>
</table>

The current long block for these engines is **21165946**. The previous long block, 3862055, is no longer available from the supplier and is now replaced by new long block 21165946.

The following parts are not included with 21165946:
- Circulation pump
- Intake manifold
- Flywheel

The existing parts from the original engine should be reused if they are in good condition. If not new parts must be ordered to complete the installation.

The following parts come with 21165946:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>#</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>3853273</td>
<td>locknut</td>
<td>6</td>
<td>coupler studs</td>
</tr>
<tr>
<td>3853274</td>
<td>stud</td>
<td>6</td>
<td>coupler, SXjDP-Sj XDP</td>
</tr>
<tr>
<td>3857937</td>
<td>stud</td>
<td>2</td>
<td>ground</td>
</tr>
</tbody>
</table>
The Crankshaft Sensor is not included with the new longblock. Move the sensor from the original engine to the longblock.

**NOTICE!** Install sensor with o-ring. If original o-ring is worn or damaged, replace. See catalog for o-ring PIN.

On **GL models** the sensor is installed in the timing cover but is not electrically functional. The sensor is not connected to the engine harness. The sensor is needed to seal the timing cover and crankcase.

21165946 has no intake manifold. The intake from the original engine must be moved to the longblock.

Remove intake, carb and spacer as an assembly from original engine.
Discard intake gaskets.
Save intake/carb assembly, intake screws.
Inspect all saved parts for condition, replace as needed.
Clean all saved parts with brush and cleaning solvent.
Do not immerse intake/fuel assembly in cleaning solvent.
Install gasket, sealer and intake assembly on longblock.

**NOTICE!** Engine failure may occur if intake is not installed correctly on longblock.

Check Workshop Manual 7743365 covering 4.3L Engine Mechanical for the procedure for the sealer (S) and torquing the bolts (T) on the intake. Both procedures are critical and must be followed.

21165946 is painted red. Earlier engines (* on list above) were painted dark charcoal. For dark charcoal paint order; 3851221, O.4L spray can

21165946 comes with high quality spark plugs designed for late model ignitions. The plugs are gapped (G) at 0.060" (1.52mm). These plugs will work correctly for earlier engines (* on list above), however the plugs will have to be re-gapped to match the ignition on the original engine. The plug gap on these engines (*) is; 0.045" (1.14mm).
Order the following gaskets, seals to complete the installation:

1 ea. 3851981 seal, oil fitting
1 ea. 3852109 gasket, distributor
1 ea. 3852111 gasket, thermo hsg 1)
2 ea. 3852477 gasket, water pump
1 ea. 3852497 o-ring, pwr. strg. line
1 ea. 3853279 gasket, carb adapter 1)
1 ea. 3853280 gasket, carb 1)
2 ea. 3853412 gasket, exhaust manf.
1 ea. 3855807 gasket, intake manf.

1) only needed if these parts are removed from intake manifold.