Exhaust Manifold - Remove and Install

SMCS - 1059-010

Removal Procedure

Start By:

A. Remove the turbocharger. Refer to Disassembly and Assembly, "Turbocharger - Remove".
B. Remove the water temperature regulator. Refer to Disassembly and Assembly, "Water Temperature Regulator - Remove and Install".

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NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

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1. Remove exhaust manifold shield (3). Remove the nuts and spacers from studs (1). Remove exhaust manifold (2).

2. Remove sleeve assemblies (4) from the cylinder head.
Installation Procedure

Table 1

<table>
<thead>
<tr>
<th>Required Tools</th>
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<tbody>
<tr>
<td>Tool</td>
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<tr>
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<tr>
<td>A</td>
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<tr>
<td>B</td>
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NOTICE

Keep all parts clean from contaminants.

CONTAMINANTS MAY CAUSE RAPID WEAR AND SHORTENED COMPONENT LIFE.

Note: Before assembly, check the condition of the sleeve assemblies, the studs, and the nuts. If the part is worn or damaged, use new parts for replacement.

1. Apply Tooling (A) to studs (1). If the studs were removed from the cylinder head, install the studs in the cylinder head. Tighten the studs to a torque of 35 ± 5 N-m (26 ± 4 lb ft).

2. Install sleeve assemblies (4) in the cylinder head.

3. Apply Tooling (B) to the outside diameter of the male ends of exhaust manifold (2). Put clean engine oil on the female ends of
4. Apply Tooling (A) to the ends of studs (1). Put exhaust manifold (2) in position on the studs. Install the spacers and nuts on studs (1).

5. Tighten the nuts for the exhaust manifold in a numeric sequence to a torque of 38 ± 5 N·m (28 ± 4 lb ft).

6. Install exhaust manifold shield (3). Apply Tooling (A) to the nuts for the exhaust manifold shield. Tighten the nuts for the shield to a torque of 25 ± 7 N·m (18 ± 5 lb ft).

End By:

a. Install the water temperature regulator. Refer to Disassembly and Assembly, "Water Temperature Regulator - Remove and Install".

b. Install the turbocharger. Refer to Disassembly and Assembly, "Turbocharger - Install".