## Abnormal noise of the engine

<table>
<thead>
<tr>
<th>Inspection</th>
<th>Possible causes</th>
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</table>
| 1. Abnormal noises from the valve | (1) Valve clearance is too big.  
Abnormal noises from the valve.  
(2) Valve is worn. |
| 2. Abnormal noises from the cylinder | (1) Piston and cylinder block are worn.  
(2) Piston pin and the small end hole of the connection rod are worn.  
(3) The Crank pin and the connecting rod big end are worn. |
| 3. Abnormal noises from the timing chain | (1) The camshaft is worn.  
(2) The timing driven sprocket is worn.  
(3) The timing chain stretches.  
(4) The automatic tensioner of the timing chain fails or the guide pulley is worn. |
| 4. Abnormal noises from driving gear and driven gear | (1) The machining precision of the gears are insufficient.  
(2) The teeth of the gear are worn.  
(3) The fit clearance between the driving gear and driven gear is too small or too big. |