

28.Engine Noise

A: INSPECTION

| Type of sound | Condition | Possible cause |
|---|--|--|
| Regular clicking sound | Sound increases as engine speed increases. | <ul style="list-style-type: none"> Valve mechanism is defective. Incorrect valve clearance Worn valve rocker Worn camshaft Broken valve spring |
| Heavy and dull clank | Oil pressure is low. | <ul style="list-style-type: none"> Worn crankshaft main bearing Worn connecting rod bearing (large end) |
| | Oil pressure is normal. | <ul style="list-style-type: none"> Damaged engine mounting Loosened flywheel mounting bolt |
| High-pitched clank (Spark knock) | Sound is noticeable when accelerating with an overload condition. | <ul style="list-style-type: none"> Ignition timing advanced Accumulation of carbon inside combustion chamber Wrong heat range of spark plug Improper octane value gasoline |
| Clank when engine speed is 1,000 to 2,000 rpm | Sound is reduced when fuel injector connector of noisy cylinder is disconnected. * | <ul style="list-style-type: none"> Worn crankshaft main bearing Worn connecting rod bearing (large end) |
| Knocking sound when engine is operating under idling speed and engine is warm | Sound is reduced when fuel injector connector of noisy cylinder is disconnected. * | <ul style="list-style-type: none"> Worn cylinder liner and piston ring Broken or stuck piston ring Worn piston pin and hole at piston end of connecting rod |
| | Sound is not reduced if each fuel injector connector is disconnected in turn. * | <ul style="list-style-type: none"> Worn cam sprocket Worn camshaft journal bore in cylinder head |
| Squeaky sound | — | Insufficient generator lubrication |
| Rubbing sound | — | Poor contact of generator brush and rotor |
| Gear scream when starting engine | — | <ul style="list-style-type: none"> Defective ignition starter switch Worn gear and starter pinion |
| Sound like polishing glass with a dry cloth | — | <ul style="list-style-type: none"> Loose V-belt Defective water pump shaft |
| Hissing sound | — | <ul style="list-style-type: none"> Insufficient compression Air leakage in air intake system, hose, connection or manifold |
| Timing belt noise | — | <ul style="list-style-type: none"> Loose timing belt Timing belt contacting with adjacent part |
| Valve noise | — | Incorrect valve clearance |

* When disconnecting the fuel injector connector, the malfunction indicator light illuminates and DTC is stored in ECM memory. Therefore, perform the Clear Memory Mode <Ref. to EN(H4SO)(diag)-51, OPERATION, Clear Memory Mode.> and Inspection Mode <Ref. to EN(H4SO)(diag)-41, PROCEDURE, Inspection Mode.> after connecting the fuel injector connector.

Engine Noise

MECHANICAL

EXHAUST

EX(H4SO)

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