

11.Engine Cooling System Trouble in General

A: INSPECTION

| Trouble | Possible cause | Corrective action |
|----------------------|---|---|
| Overheat | a. Insufficient engine coolant | Replenish engine coolant, inspect for leakage, and repair it if necessary. |
| | b. Loose timing belt | Repair or replace timing belt tensioner. |
| | c. Oil on timing belt | Replace. |
| | d. Malfunction of thermostat | Replace. |
| | e. Malfunction of water pump | Replace. |
| | f. Clogged engine coolant passage | Clean. |
| | g. Improper ignition timing | Inspect and repair ignition control system.<Ref. to EN(H4SO)(diag)-2, Basic Diagnostic Procedure.> |
| | h. Clogged or leaking radiator | Clean, repair or replace. |
| | i. Engine oil mixed in engine coolant | Replace the engine coolant. If it is ineffective, inspect and repair the engine side. |
| | j. Air/fuel mixture ratio too lean | Inspect and repair the fuel injection system. <Ref. to EN(H4SO)(diag)-2, Basic Diagnostic Procedure.> |
| | k. Excessive back pressure in exhaust system | Clean or replace. |
| | l. Insufficient clearance between piston and cylinder | Adjust or replace. |
| | m. Slipping clutch | Correct or replace. |
| | n. Dragging brake | Adjust. |
| | o. Defective radiator fan | Inspect the radiator fan relay, engine coolant temperature sensor or fan motor and replace them. |
| Over-cooling | a. Ambient temperature extremely low | Partly cover radiator front area. |
| | b. Defective thermostat | Replace. |
| Engine coolant leaks | a. Loosened or damaged connecting units on hoses | Correct or replace. |
| | b. Leakage from water pump | Replace. |
| | c. Leakage from water pipe | Correct or replace. |
| | d. Leakage around cylinder head gasket | Retighten the cylinder head bolts or replace the gasket. |
| | e. Cylinder head and block damaged or cracked | Correct or replace. |
| | f. Damaged or cracked thermostat case | Correct or replace. |
| | g. Leakage from radiator | Correct or replace. |
| Abnormal noise | a. Timing belt problem | Replace. |
| | b. Defective radiator fan | Replace. |
| | c. Defective water pump bearing | Replace water pump. |
| | d. Defective water pump mechanical seal | Replace water pump. |

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COOLING

LUBRICATION

LU(H4SO)

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