

# ENGINE COOLING SYSTEM TROUBLE IN GENERAL

Cooling

## 10. Engine Cooling System Trouble in General

S106078

### A: INSPECTION

S106078A10

| Trouble                        |  | Corrective action  |
|--------------------------------|--|--|
| Over-heating                   | a. Insufficient engine coolant   | Replenish engine coolant, inspect for leakage, and repair.   |
|                                | b. Loose timing belt   | Repair or replace timing belt tensioner.   |
|                                | c. Oil on drive 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.<br><Ref. to EN(H4)-2 ENGINE, PROCEDURE, Basic Diagnostic Procedure.> |
|                                | h. Clogged or leaking radiator   | Clean or repair, or replace.   |
|                                | i. Improper engine oil in engine coolant   | Replace engine coolant.  |
|                                | j. Air/fuel mixture ratio too lean   | Inspect and repair fuel injection system.<br><Ref. to EN(H4)-2 ENGINE, PROCEDURE, 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   | Repair or replace.   |
|                                | n. Dragging brake  | Adjust.  |
|                                | o. Improper transmission oil   | Replace.   |
| p. Defective thermostat        | Replace.   |  |
| q. Malfunction of electric fan | Inspect radiator fan relay, engine coolant temperature sensor or radiator motor and replace there. |  |
| Over-cooling                   | a. Atmospheric temperature extremely low   | Partly cover radiator front area.  |
|                                | b. Defective thermostat  | Replace.   |
| Engine coolant leaks.          | a. Loosened or damaged connecting units on hoses   | Repair or replace.   |
|                                | b. Leakage from water pump   | Replace.   |
|                                | c. Leakage from water pipe   | Repair or replace.   |
|                                | d. Leakage around cylinder head gasket   | Retighten cylinder head bolts or replace gasket.   |
|                                | e. Damaged or cracked cylinder head and crank-case   | Repair or replace.   |
|                                | f. Damaged or cracked thermostat case  | Repair or replace.   |
|                                | g. Leakage from radiator   | Repair or replace.   |
| Noise                          | a. Defective drive belt  | Replace.   |
|                                | b. Defective radiator fan  | Replace.   |
|                                | c. Defective water pump bearing  | Replace water pump.  |
|                                | d. Defective water pump mechanical seal  | Replace water pump.  |