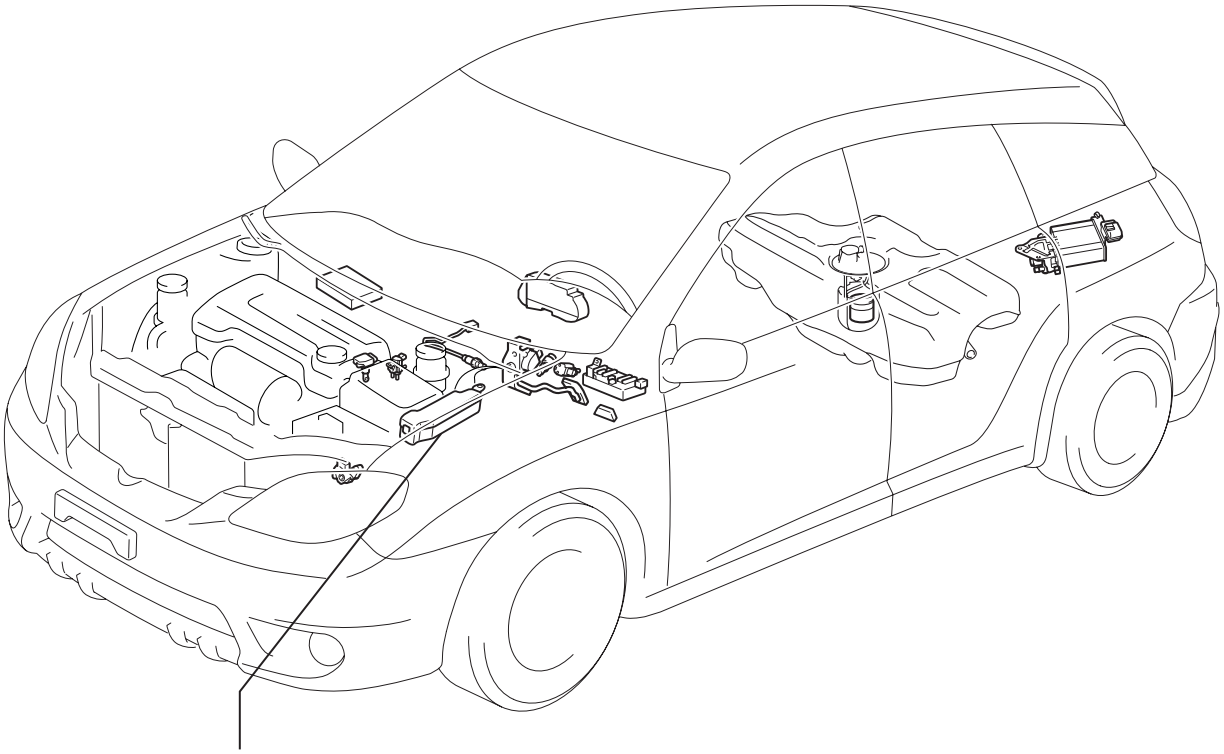
# COOLING FAN SYSTEM

## PARTS LOCATION





**ENGINE ROOM R/B (RELAY BLOCK)**

- COOLING FAN RELAY

- COOLING FAN RELAY NO. 2

Y

A119639E02

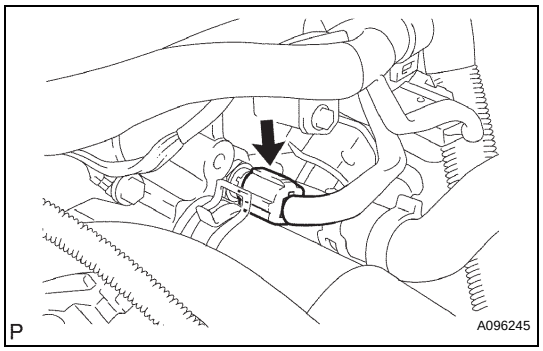
# ON-VEHICLE INSPECTION

**1. CHECK COOLING FAN OPERATION AT LOW TEMPERATURES**

HINT:
Below 83°C (181°F)

(a) Turn the ignition switch to ON.

(b) Check that the cooling fan stops.
If not, check the cooling fan relays and engine coolant temperature sensor, then check for disconnection of the connector or wire break between the cooling fan relay and engine coolant temperature sensor.




(c) Disconnect the engine coolant temperature sensor connector.

(d) Check that the cooling fan rotates.
If not, check the fuses, cooling fan relays, ECM and cooling fan, then check for a short circuit between the cooling fan relay and engine coolant temperature sensor.

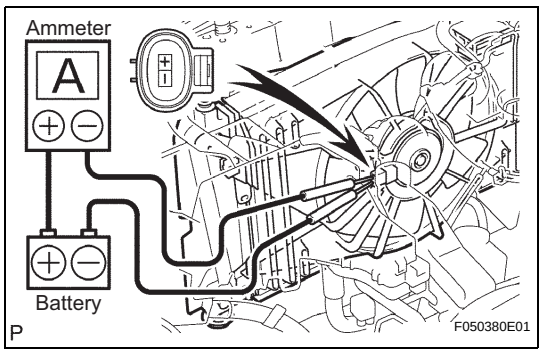
(e) Reconnect the engine coolant temperature sensor connector.

**2. CHECK COOLING FAN OPERATION AT HIGH TEMPERATURES**

HINT:
Above 93°C (199°F)

(a) Start the engine, then raise the coolant temperature to above 93°C (199°F).
HINT:
Coolant temperature is the value detected by the engine coolant temperature sensor on the cylinder head.

(b) Check that the cooling fan rotates.
If not, replace the engine coolant temperature sensor.




**3. INSPECT COOLING FAN MOTOR**

(a) Disconnect the fan connector.

(b) Connect the battery and ammeter to the fan connector.

(c) Check that the fan rotates smoothly, then check the reading on the ammeter.
**Standard:**
**7.9 to 10.9 A at 20°C (68°F)**
If the amperage is not as specified, replace the cooling fan motor.

(d) Reconnect the fan connector.