

## COOLING FAN SYSTEM (1AZ-FE)

### ON-VEHICLE INSPECTION

#### HINT:

It is normal that the cooling fan sometime rotates when the ignition switch is turned from ACC to ON.

#### 1. CHECK COOLING FAN OPERATION WITH LOW TEMPERATURE (Below 83°C (181°F))

- (a) Turn the ignition switch ON.
- (b) Check that the cooling fan stops.

If not, check the cooling fan relay and water temperature sensor, and check for disconnection of connectors or wire break between the cooling fan relay and water temperature sensor.

- (c) Disconnect the water temperature sensor connector.
- (d) Check that the cooling fan rotates.

If not, check the fuses, cooling fan relay, engine ECU and cooling fan, and check for a short circuit between the cooling fan relay and water temperature sensor.

- (e) Reconnect the water temperature sensor connector.

#### 2. CHECK COOLING FAN OPERATION WITH HIGH TEMPERATURE (Above 98°C (208°F))

- (a) Start the engine, and raise coolant temperature to above 98°C (208°F).
- (b) Check that the cooling fan rotates.

If not, replace the water temperature sensor.

#### 3. INSPECT COOLING FAN

- (a) Disconnect the cooling fan connector.
- (b) Connect battery and ammeter to the cooling fan connector.
- (c) Check that the cooling fan rotates smoothly, and check the reading on the ammeter.

##### Standard amperage:

**80W TYPE 5.2 – 8.2 A at 20°C (68°F)**

**120W TYPE 7.6 – 10.6 A at 20°C (68°F)**

- (d) Reconnect the cooling fan connector.